

January

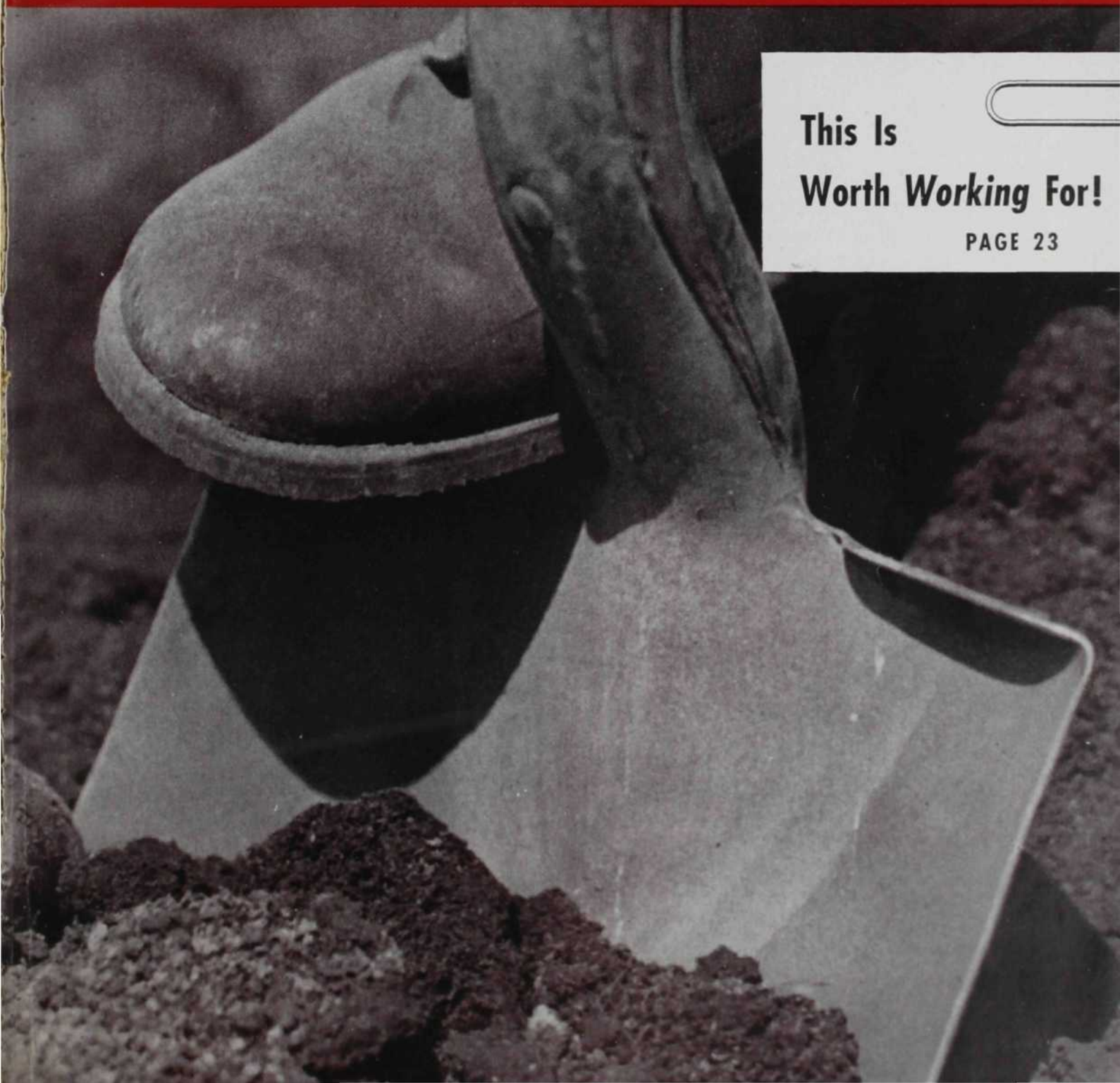
NATION'S

1944

BUSINESS

This Is
Worth *Working* For!

PAGE 23





Copyright 1944, The Pullman Company

"Maybe you're the guy I'm grateful to!"

"Tough day! Assembly line got all snarled up. Didn't finish till seven o'clock.

"Then came a phone call from Plant Number 5. They need an engineer. Tomorrow morning. 300 miles away. So it's up to me to climb on my horse—my *iron horse*.

"I tried for a Pullman bed, of course, as soon as I knew I had to go, because a fellow sure does need *sleep* going to *keep* going on a job like mine. But everything was sold. Which didn't surprise me, either, for *I know that half the Pullman fleet is busy moving troops*. And that the other half is carrying more passengers than the *whole fleet* did in peacetime.

"Anyway, there I was—dead tired—and no bed. I saw myself sitting up

all night and getting to that essential job too fagged out to tell a blueprint from a blueprint.

"But somebody *cancelled* a reservation just in time for me to get this space. Maybe it was *you*! If it was, thanks a million, because . . . boy, will I *sleep* tonight! And will that sleep pay *dividends* tomorrow!"

* * *

You never know how important the Pullman bed that you can't use may be to someone else. So *please* cancel *promptly* when plans change.

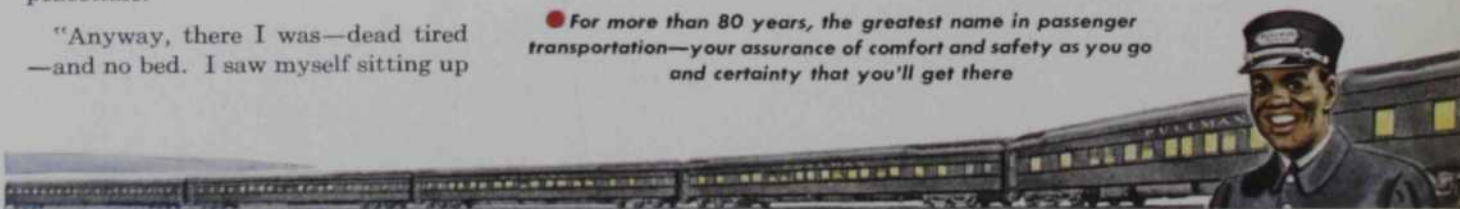
That is one of the most helpful contributions you can make to wartime travel, because sleeping cars are loaded to a higher percentage of capacity than ever before. Yet practically every train carrying Pullmans *still* goes out with *wasted space* due to people who either just don't show up or who cancel *too late* for the space to be assigned to others.

And only *your cooperation* can prevent this waste of needed accommodations!

★ BACK THE ATTACK—WITH WAR BONDS ★

PULLMAN

● For more than 80 years, the greatest name in passenger transportation—your assurance of comfort and safety as you go and certainty that you'll get there





Found—a New Source of Rubber Right in Your Own Garage

This is a valve cap.

Engineers who devoted years to the study of tire maintenance designed this important little gadget to keep dirt *out* of tires and air pressure *in*.

Yet in a comprehensive analysis of over 300 fleets made by B. F. Goodrich engineers recently, only one fleet had valve caps on all tires!

It is safe to say that if this one rule of tire health were observed by every truck operator in the country and proper inflation maintained, enough rubber would be saved to ease the tire shortage.

Recognizing that improper tire care wastes thousands of tons of rubber, The B. F. Goodrich Company organized a Tire Conservation Department long before Pearl Harbor just to help fleet owners conserve rubber.

This department, staffed by factory-trained men, has since that time taken over the complete supervision of all tire maintenance problems for hun-

dreds of truck fleets with from 10 to 3500 vehicles each.

Under this low-cost comprehensive point-by-point program job-experienced consultants apply to your tires the rubber-saving "know how" they have acquired through solving literally thousands of other maintenance problems. They check all factors which cause undue tire wear; show you how to eliminate most premature failures; and make mileage-stretching recommendations which cut your costs—sometimes overnight.

Many fleet owners have written to say how amazed they were at the results obtained. Typical of their comments are: "We believe we will show a 25% saving," or "It saves far more than it costs,"

and "The number of failures has been reduced 60%."

Only a few trained men are available to take over a limited number of additional fleets in certain areas. If you would like to know how this tire conservation plan can be applied to your equipment, write the Tire Conservation Department, The B. F. Goodrich Company, Akron, Ohio.





The heavy hand of taxes...

The heavy hand of postwar taxes hangs over every family in America unless you do something about it. Obviously, Federal taxes cannot be lowered for years to come. But you *can* reduce or even eliminate municipal taxes with the profits a Fairbanks-Morse Diesel-driven Light and Power Plant can make for your city.

Start your future planning now. Investigate the qualities and low-cost service of a Fairbanks-Morse Diesel-operated Power & Light Plant for after the war. Be at the top of the list when deliveries are resumed.

Write: Fairbanks, Morse & Co., 201 Fairbanks-Morse Building, Chicago 5, Illinois.

BUY WAR BONDS



FAIRBANKS - MORSE

DIESEL ENGINES
PUMPS
MOTORS
GENERATORS
RAILROAD EQUIPMENT

WATER SYSTEMS
SCALES
STOKERS
FARM EQUIPMENT



Diesels

THE SEARCH THAT NEVER ENDS



IN THE industrial life of America, research has been of constantly increasing importance. And today it is a national resource, for the research of industrial and college laboratories is proving its value in War.

To the Bell System, research is an old idea, for the telephone itself was born in a laboratory. Behind its invention, sixty-nine years ago, were researches in electricity and acoustics and in speech and hearing.

And, ever since, there has been a laboratory where scientists have searched to know more about these subjects; and with their associated engineers have applied the new knowledge, fitting it with all the old, to make the telephone better and better.

Their fields of inquiry have broadened and deepened through these years; they inquire into all the sciences and engineering arts which have any promise of improving the telephone. Much has been learned but still more will be, because their search goes on. That is why the telephone laboratory grew to be Bell Telephone Laboratories, Incorporated, the largest

industrial laboratory in the world. And it exists to improve telephone service.

Improvements in industry can be left to chance in the hope that some one, sometime, will think of something useful; that some good invention will turn up.

The other way to make improvements is to organize so that new knowledge shall always be coming from researches in the fundamental sciences and engineering arts on which the business is based. From that steady stream will arise inventions and new methods, new materials and improved products.

This is the way of Bell Laboratories. Its search will never end. And as fast as it can the Laboratories will apply its new knowledge practically to the design of equipment and communication systems.

At present—and this started before Pearl Harbor—its trained scientists and engineers and all their skilled associates are concentrating on products of importance to our armed forces. But when this work is happily over they will be ready to continue their developments for the needs of peace.



BELL TELEPHONE SYSTEM

"Research is an effort of the mind to comprehend relationships no one has previously known; and it is practical as well as theoretical." BELL TELEPHONE LABORATORIES

HAS YOUR FIRM A GOOD

WAGE INCENTIVE PLAN ?



BUY
U. S. WAR
BONDS

You've Got to Spend Money to Make Money

GEORGE S. MAY COMPANY

Business Engineering

NEW YORK

2600 North Shore Ave., CHICAGO

ATLANTA

WASHINGTON, D. C.

CANADA: Toronto • Montreal

SAN FRANCISCO

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Cover photograph by R. I. Nesmith

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As the official magazine of the Chamber of Commerce of the United States this publication carries authoritative notices and articles in regard to the activities of the Chamber; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers.

Although the editors will make every effort to return unsolicited manuscripts promptly and in good condition, Nation's Business cannot accept responsibility for loss or damage of this material.



THE tremendous expansion of Industry to take care of war production has created many new air-cleaning problems and brought dust control into the forefront of production planning. Today, Industry knows that if the needed volume of manufactured goods is to be attained, dust must be eliminated. Unless adequate atmospheric and process dust control equipment is installed, production schedules are subject to serious disruption.

AAF equipment is in extensive use today throughout the nation and will assume a still greater importance in peacetime manufacturing. May we begin NOW to help you plan your post-war dust control? There is no obligation in discussing your future needs today.



Send for "AAF In Industry," a 30-page booklet, which describes the full line of AAF atmospheric and process dust control equipment. For convenience, use the coupon below.



COUPON

American Air Filter Company, Inc.
109 Central Avenue, Louisville, Ky.
Please send free copy of "AAF In Industry".

Name _____
Company _____
Address _____
City _____
State _____

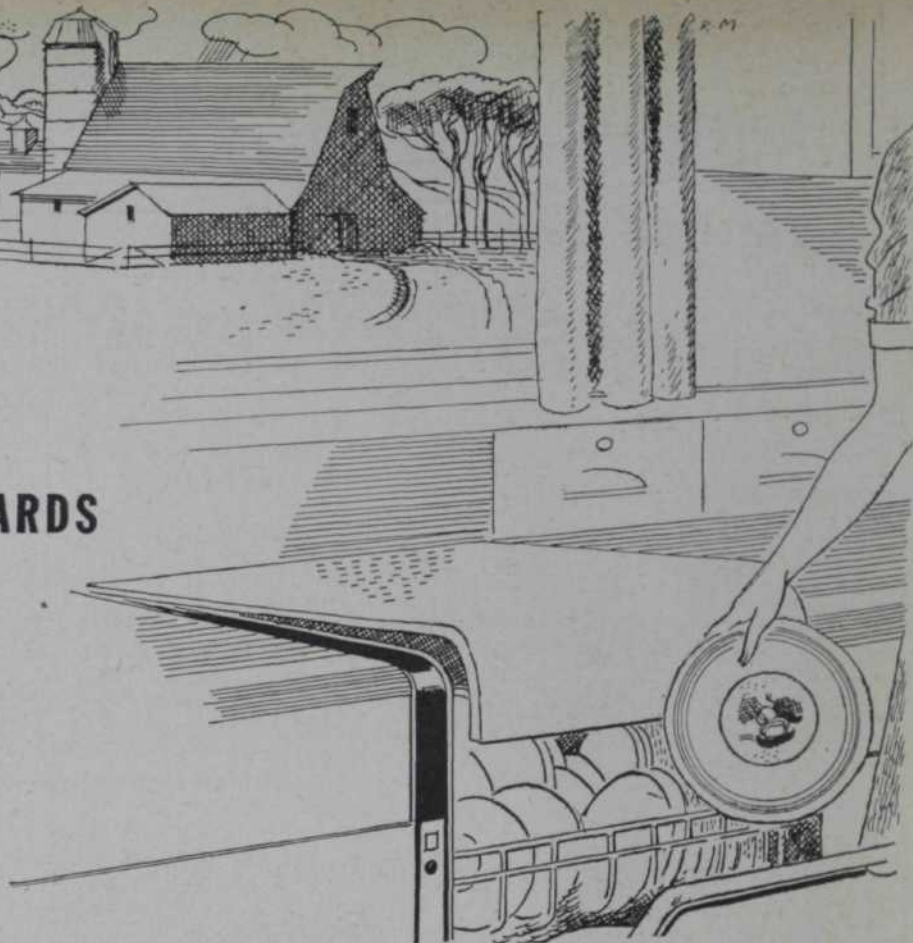


AMERICAN AIR FILTER CO., INC.

109 Central Ave., Louisville, Ky.

In Canada, Darling Bros., Ltd., Montreal

THE STUFF HIGHER LIVING STANDARDS ARE MADE OF



Greater workability is what a material has if more things can be made out of it with less effort.

It helps raise a nation's living standards because it reduces costs, thereby making more things saleable and so increasing employment.

Aluminum is extremely workable.

We mean *easy to work*. To machine. To form. To join. Details are slightly different than with other metals. But ours is by no means a temperamental metal. Its workability is a fact that is being confirmed in the largest to the smallest war plants today.

Whatever your postwar product, if it requires lightness and strength or any other of the dozen aluminum advantages, the workability of Alcoa Alloys can be an element in favorable production costs.

Take, for example, refrigerator coils. You wiggle a length of Alcoa

tubing into shape, fasten it onto a backing of Alcoa Alclad sheet, slip them into a brazing furnace and out comes a perfect cooling system—self-soldered, uniform, smooth finished. It is better than prewar units and costs less.

Aluminum, in this instance, can

help bring electric refrigeration to more people.

And greater mass distribution of postwar conveniences is not just a humanitarian idea. It is an industrial *must* for national economic health. It's what we've been getting at in two years' talk about Imaginering.

In all mass production, however, no matter what material is used, uniformity according to specification is essential. It takes more than mechanical control to turn out miles of aluminum strip, absolutely identical mile after mile. It demands an element of human experience called *knack*.

Alcoa has been accumulating *knack* since the first commercial aluminum was pried loose from its ore.

ALUMINUM COMPANY OF AMERICA,
2125 Gulf Building, Pittsburgh, Pa.


Workability

ONE OF

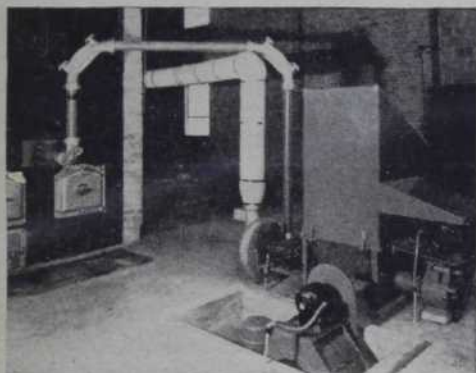
12 REASONS FOR USING

ALCOA

ALUMINUM



SAVING COAL IS OUR BUSINESS



Illustrated above, the Iron Fireman Pneumatic Spreader Stoker

Iron Fireman's Ability to Save Fuel Has Been Proved by Performance

THE intelligent way to save fuel is to stop wasting it. Old-fashioned methods of burning coal do waste a substantial percentage of the heat units which coal contains. The Iron Fireman method of firing saves these heat units and turns them into useful heat. Iron Fireman's scientific combustion saves coal in the firebox. Iron Fireman automatic fire control saves by creating just the amount of heat required for comfort or steam for power.

Business men everywhere, facing fuel and labor shortages, are turning to Iron Fireman firing. A survey of your boiler plant, made without cost or obligation, will give you the facts—tell what an Iron Fireman installation will do for you. Our nationwide organization of experienced factory representatives and dealers is at your service. Immediate delivery. Write or wire Iron Fireman Manufacturing Co. 3450 West 106th Street, Cleveland 11, Ohio.

Iron Fireman Manufacturing Co., Portland, Oregon
Cleveland, Ohio; Toronto, Canada



IRON FIREMAN

Automatic Coal Stokers

Through the Editor's Specs

On getting ready

MANAGEMENT already is facing—and meeting—one major postwar problem. Service men rendered unfit for active duty because of age, wounds, shell-shock and other disabilities are beginning to trickle back into the stream of civilian employment. Most of these, of course, return direct to the jobs they left to enter the service. The problem lies in adjusting them to new work which their disabilities will permit them to perform.

General Motors recently announced a detailed plan for the absorption of these men in the various GM plants. The basis of this plan is the proposition that a handicapped worker, once he is successfully placed, ceases to be handicapped from the standpoint of productivity or earning power. Plant doctors will give returned service men physical examinations and recommend the type of work to which they can best be assigned. Handicapped employees will be paid the full rate for the jobs in which they are placed.

Here's a type of planning which can't be undertaken too soon.

Notes on manpower

WE STOOD in Grand Central Station the other day and watched several hundred girls, still in civilian attire, file past in double file, shepherded by uniformed WAVES. The girl enlistees were changing trains, en route to a WAVE training center. Our companion, who employs a large number of young women on war work, watched in silence until the procession passed. Then he sighed:

"Guess I'd better call the shop and see how many of those girls were ours."

A few doors down the street we saw another nostalgic reminder of the manpower—or womanpower—shortage, in a small sign posted in a drugstore window. It said, "Wanted: Soda-jerk. Attractive future."

Beulah land

WONDER WHAT would happen if other firms followed the practice of the American Distilling Company, which presented its stockholders, in lieu of a dividend, the right to buy 245,000 barrels of whiskey at cost.

Oh, happy day for the stockholders, if

the meat packers should adopt this policy. Or the butter people, or the gasoline refineries and the nylon hosiery manufacturers.

The list could be extended indefinitely into the expanding area of shortage of critical items. Of course, the OPA might call a halt to the whole joyous business, but there's no law against thinking about it.

One thing such conjecture proves to our positive satisfaction: real wealth consists of things, not money. Yes, that's elementary, but for a long time it's been shelved with some other forgotten facts, such as the propositions that fire burns, and two plus two equals four.

We pass

A CHEF out in San Francisco says rationing is the best thing that ever happened to Americans, because it compels the housewife to learn how to make new dishes from unfamiliar ingredients. This means that America is developing a new cuisine, which, by the time the war ends, should be simply wonderful, he adds.

In view of our own recent experience with "unfamiliar ingredients," we plan no protest if we have to go back, postwar, to steaks, apple pie with cheese, butter and such-like out-moded items of diet.

Assignment for 1944

IT'S QUITE all right to call the other fellow a fascist, the Supreme Court holds in an opinion written by Justice Frankfurter. No particular harm done, says the high Court; it's simply part of the "conventional give and take of political and economic controversy." The Court's ruling grew out of a case in which certain picketing signs labeled an employer a "fascist."

We regret that Justice Frankfurter and his colleagues didn't pause in their labors to give the nation a precise, exact definition of "fascist." The dictionaries are pretty vague about it, although the word is freely and loosely used in this country as an epithet, much as "communist" was once upon a time.

Back when Vice President Wallace first began seeing fascists under the bed, we initiated a search for someone who knew exactly what a fascist was. In

OUR BIGGEST WAR JOB *is just Starting!*

American troops are attacking!

They need more men . . . materials . . . supplies.

This means a bigger job than ever for the Erie and other American railroads.

In Sicily, nearly half of all 55mm guns, 54% of 37mm gun carriages, 22% of 105mm howitzer carriages, and 36% of 75mm gun carriages put into action were lost the first week.

All of this equipment must be replaced and increasing quantities delivered wherever needed.

As we gain additional territory . . . food, fuel, equipment, and munitions must be transported in greater volume over longer distances.

Fighting men consume almost twice as much food as civilians. They need more clothing . . . equipment . . . fuel for planes, tanks, trucks . . . guns . . . munitions.

Hauling all these to ships ready to carry them to our troops is the gigantic task of your railroads.

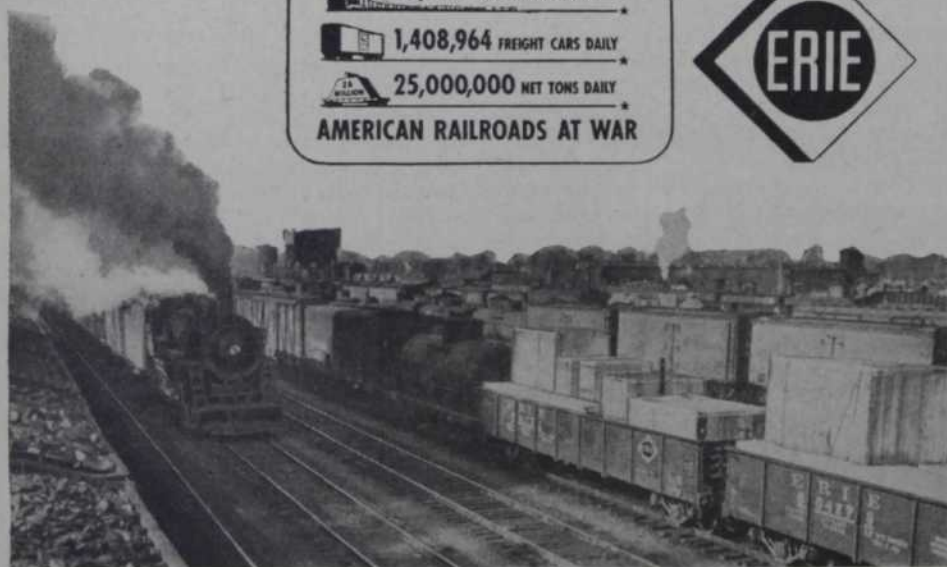
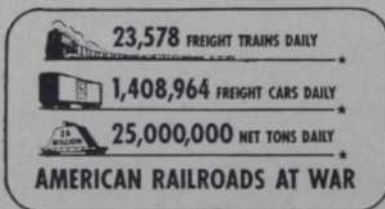
Fuel and supplies also must be delivered to the Navy and Merchant Marine for trips to battlefronts often halfway around the world.

However big the job may become, you can depend upon Erie and other American railroads . . . with the continued helpful cooperation of travelers and shippers . . . to keep 'em rolling for victory.

Erie Railroad

ONE OF AMERICA'S RAILROADS—ALL UNITED FOR VICTORY

Buy War Bonds and Stamps



event we found one under our bed, we wanted to know what to tell the police we had captured. We put the question to a very high official of government. He thought long and hard, and finally decided that a fascist was anyone who hated communism. By the same reasoning, we suppose anyone who hates fascism is a communist. We're still confused.

The "exact" science

IN WASHINGTON, it's a rare dispute in which the disputants are not separated by several rows of ciphers. Nobody ever wins a statistical argument, because statistics have lost all meaning.

A recent example is the dispute over how much American money we are pouring into South America to support the "Good Neighbor" policy. A senator says \$6,000,000,000. An official of the executive department indignantly denies this, says the figure is less than \$1,000,000,000, later raises the ante to \$2,000,000,000; somebody else says \$3,000,000,000. Nobody seems to know, or to have much hope of arriving at a true figure.

For another, Secretary Ickes says the coal miners, by cutting their lunch period from half an hour to 15 minutes, will produce 20,000,000 more tons of coal annually. Another "authority" reports that the loss of 15 minutes' rest in mid-day will so fatigue the miners that they will produce 40,000,000 fewer tons. The difference is 60,000,000 tons—a lot of coal in anybody's reckoning.

The moral seems to be that when you see a statistic coming your way, run for the foxholes.

Enough—and more—for all

THERE'VE BEEN many dire predictions about what may happen to railroad passenger revenues after the war, with an increasingly air-minded public and whole fleets of military planes available for commercial service. Some of this talk has been so far-fetched that airline officials themselves have taken the lead in pointing out its absurdness.

A realistic view is that of Edward G. Budd, president of the company bearing his name and which makes stainless steel trains. Suppose, he says, that the airlines take as much as 70 per cent of the pre-war railroad transcontinental revenue passengers—so what? He foresees, and rightly, we believe, an enormous stimulation of travel of all kinds after the war. Millions of young men and women in the armed services will have developed an appetite for travel; the stay-at-homes will want to go places and do things when war's restrictions are lifted. The answer, Mr. Budd contends, lies for the railroads in lightweight, low-cost coach trains, and in competition. Wherever competition has improved service and lowered the cost to the traveler, he points out, the demand for that service has increased by leaps and bounds.

A somewhat similar view is expressed by William I. Cantley, mechanical engineer of the Association of American

Railroads. He looks for stiff competition between the airlines and the railroads in long-distance travel, but agrees that deluxe coach trains should make a special appeal to the public in the case of distances up to 400 miles.

We'll make a little bet with ourselves right now that the big problem, post-war, will not be to find enough travel customers to make existing equipment pay, but in creating enough facilities of all kinds—busses, trains, airplanes and steamships—to meet the travel demand.

They could flip a coin

A FAMOUS London editor, visiting in New York, was discussing with his host the problems involved in handling crowds in New York's big department stores.

"Imagine," said the host, "what a job the police would have if a riot were to occur in Macy's."

"Yes," said the editor, who had Christmas-shopped at the Macy store, "but how would the police know whether it was a riot or ordinary shopping?"

He leads the rest

A COUPLE of business men were discussing their "specialties" in our office the other day. One, who specializes in property for chain store occupancy, pointed out that he has a "sure thing" because the store management always pays the rent before paying dividends. The other business man said he knew somebody with an even better "specialty" and "sure thing."

"Who?"

"Secretary Morgenthau."

We still need help

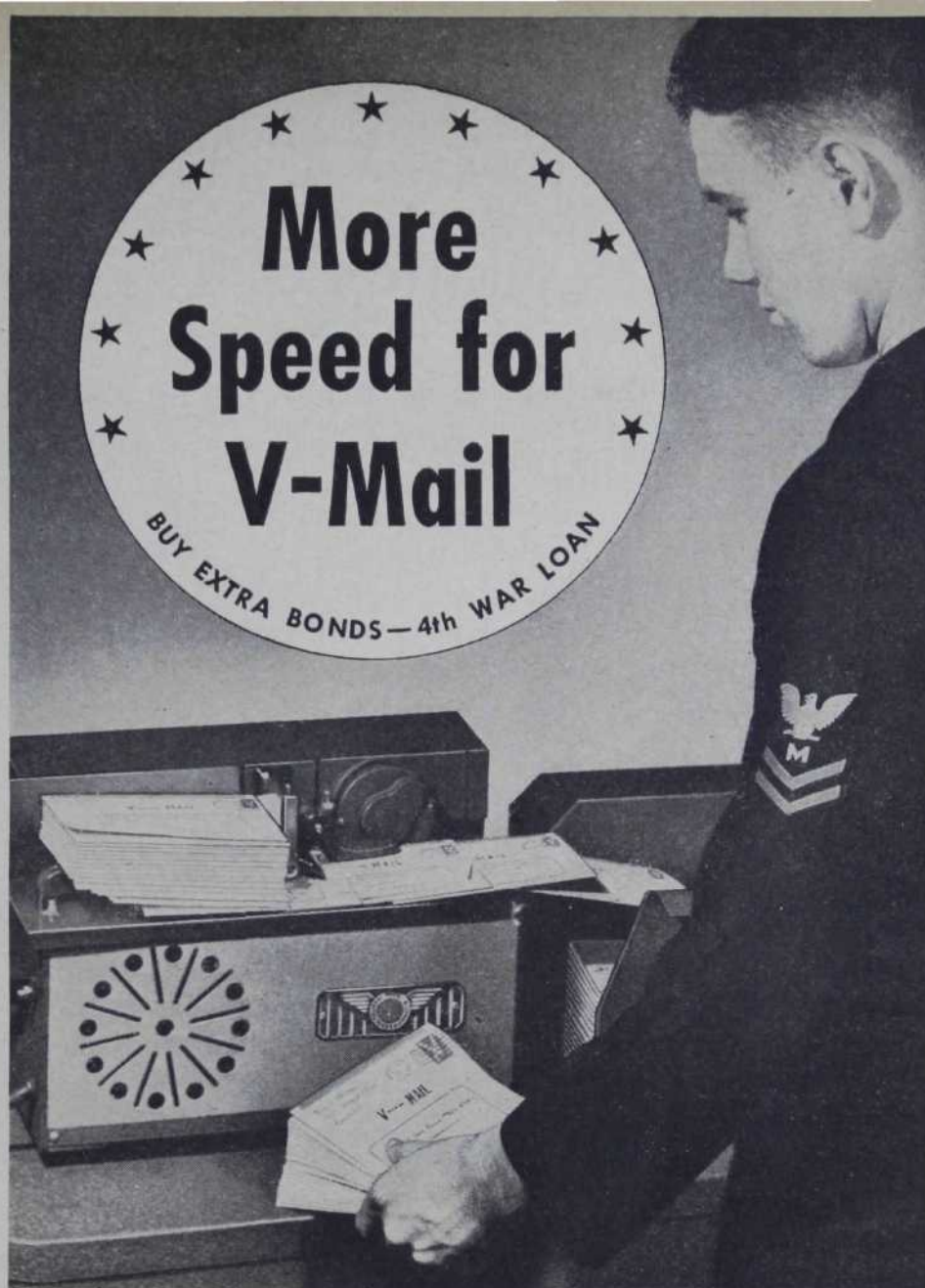
A COUPLE of issues ago we sent out an S.O.S. to readers for help on identifying a quotation to the effect that "the burdens of prosperity and progress are borne by a few creative spirits," and that by destroying a handful of such spirits the mass of humanity will someday destroy itself.

The best clue to date on the origin of the quotation comes from our old friend J. W. Binder, Secretary of the Bergen County (N.J.) Chamber of Commerce. Mr. Binder notes that the quotation was cited back in 1935 by Elon H. Hooker, in an address at Hackensack, N. J. Mr. Hooker, however, failed to give the name of the author of the quotation, and ascribed it simply to "a keen critic of our times." This leaves us just about where we were.

Quotable Quotes

LET'S GET it straight where jobs come from. It isn't employers who create jobs, it's the customers. Customers buy goods. Factories are operated to make them. Pay rolls are maintained. When the customer stops buying, employment is over.—Tom M. Girdler, chairman of the boards of Republic Steel and Consolidated Vultee Aircraft.

THE UNITED STATES will be finished as a progressive dominant nation, if we



THERE'S nothing like a letter to cheer your relatives and friends in the service. And nothing like V-Mail to get your letters overseas *fast*. Even the opening of V-Mail letters for photographing is done with *speed*—up to 500 a minute on our electric Letter Opener.

The Letter Opener is but one machine in our complete line of mail-handling equipment which, in busy wartime offices everywhere, is saving manpower, speeding production, and relieving overburdened post offices by expediting the flow of mail.

When peacetime comes, *speed* will continue to be the watchword—in a new, faster-moving business world. And the postwar mailroom will be "the heart of every office"—it will set the pace for other departments—keep things on the move right down the line. Plan now for your postwar mail-

room with the aid of a COMMERCIAL CONTROLS mailroom specialist.

Our factories today are making .30 caliber M-1 Carbines for the Armed Forces—after Victory, equipment for Complete Mailroom Service will again be in production.

Metered Mail Systems . . . Postal and Parcel Post Scales . . . Letter Openers . . . Envelope Sealers . . . Multipost Stamp Affixers . . . Mailroom Equipment. (Many units available.)

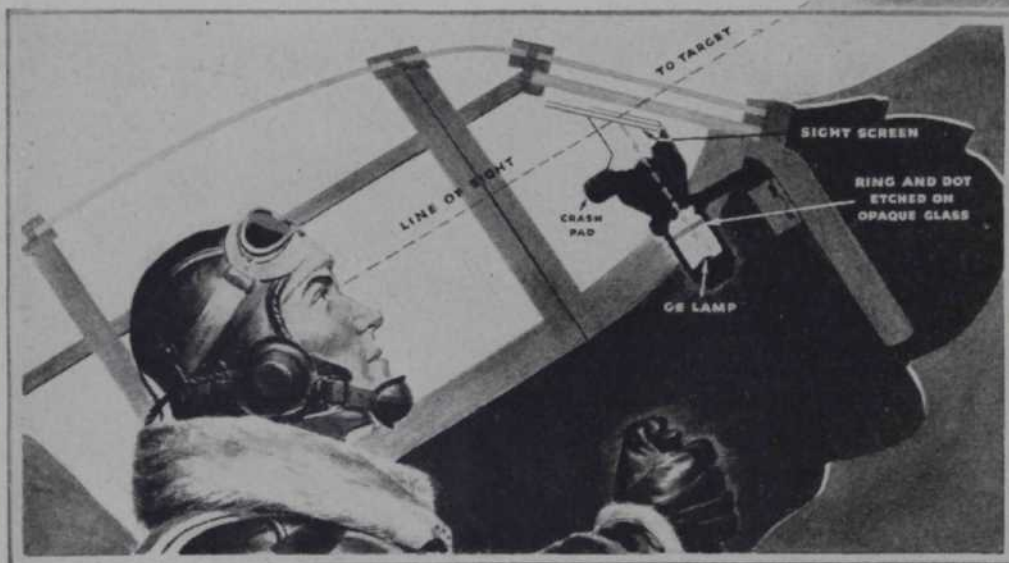
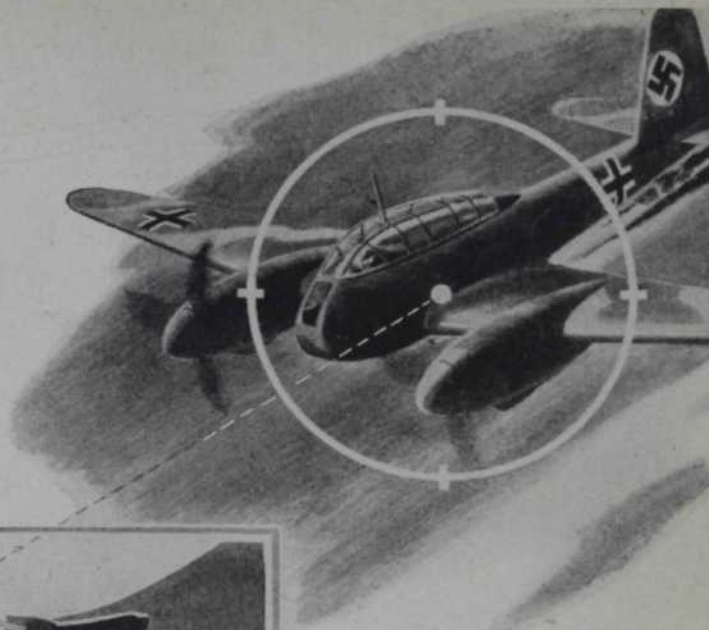


COMMERCIAL CONTROLS

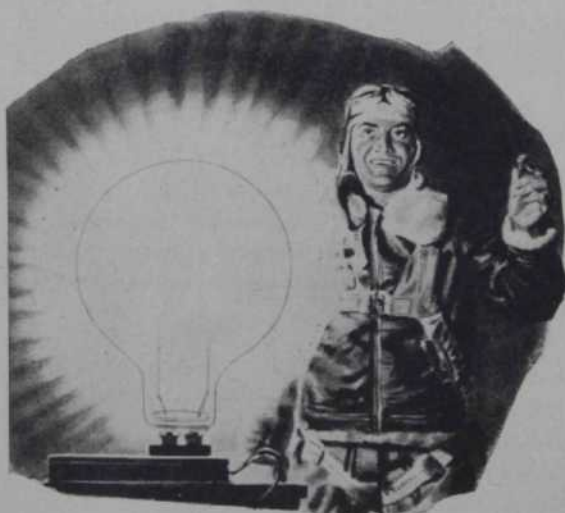
Division of
NATIONAL POSTAL METER CO., INC.
ROCHESTER 2, N. Y.
BRANCHES AND AGENCIES IN PRINCIPAL CITIES

The lamp that paints a bullseye on Axis planes!

1. Ever wonder how our gunners fire accurately at 400 m. p. h.? One reason is a new kind of gunsight. Instead of straining to hold the enemy in your sights as you would with a rifle, you see a "bullseye" of orange light . . . apparently painted right on the enemy plane (see diagram below).



2. Combat experience showed that the image had to be bright enough to show up against Sahara sands, yet not too bright for the pilot's eyes. Gunsights now are being equipped with a lamp G-E developed especially to meet these conditions. A tough problem . . . but no tougher than many which G-E research has had to solve.



3. Between the big 10,000-watt airport flood-light and the tiny "grain-of-wheat" lamp used for instrument illumination are hundreds of different G-E lamps working for victory. The research that produces these lamps is your assurance that the G-E lamps you use will give you the most light for your money. Don't waste the light from these good lamps . . . either at home or at the plant. Keep fixtures, lamps and walls clean. Avoid glare. And don't let men work in their own shadow!

**"TO MAKE LAMPS
STAY BRIGHTER LONGER"**
The Creed of G-E RESEARCH

THE BEST INVESTMENT IN THE WORLD IS IN THIS COUNTRY'S FUTURE... BUY WAR BONDS

G-E MAZDA LAMPS
GENERAL ELECTRIC



Hear the General Electric radio programs: "The G-E All-Girl Orchestra," Sunday 10 p. m. EWT, NBC; "The World Today" news every weekday, 6:45 p. m. EWT, CBS.

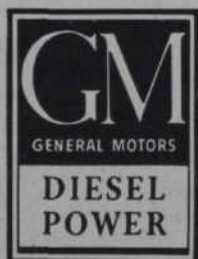
"Double-heading on old Veta Pass in 1881." Getting a train of four or five cars over this Rocky Mountain pass was work for two of the best locomotives of the time.

THE CURTAIN LIFTS ON TOMORROW'S RAILROADING



Today, long trains carrying thousands of tons of freight are hauled swiftly over the Rockies by the modern GM Diesel Locomotives of the Denver & Rio Grande Western Railroad.

WHEN you think of the Diesel locomotive, don't picture only the sleek, streamlined passenger trains which shorten distance and race the clock. Think too of the mainline Diesel freight locomotives which General Motors builds. These swift, dependable giants of power are contributing heavily to the astonishing war record of the railroads. They are raising the curtain on new standards of transportation keyed to the era which lies ahead.

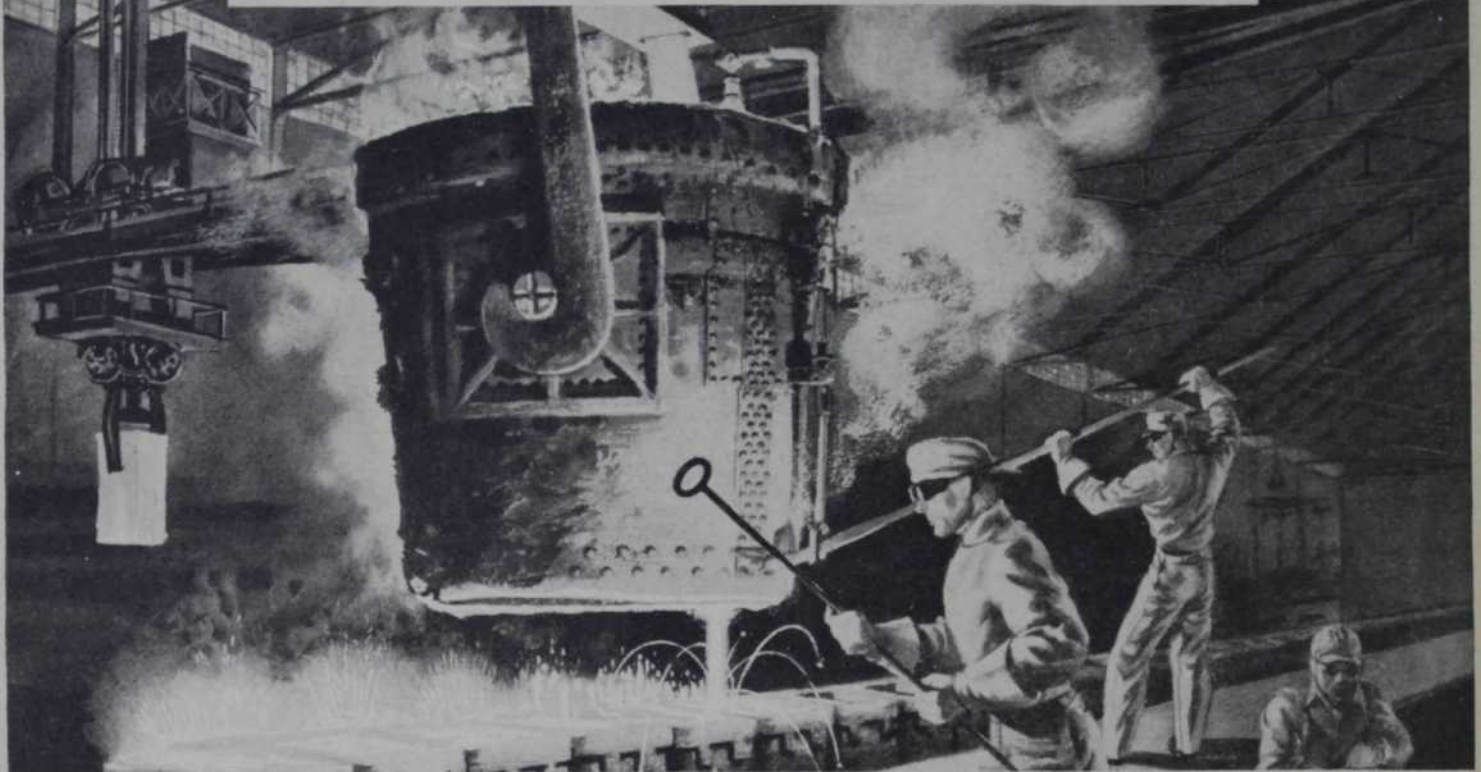


LOCOMOTIVES ELECTRO-MOTIVE DIVISION, La Grange, Ill.

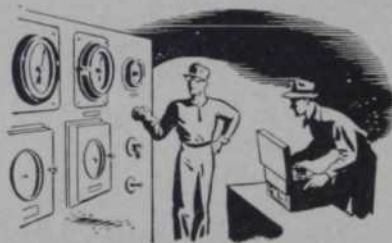
ENGINES 150 to 2000 H.P. CLEVELAND DIESEL ENGINE DIVISION, Cleveland, Ohio

ENGINES 15 to 250 H.P. DETROIT DIESEL ENGINE DIVISION, Detroit, Mich.

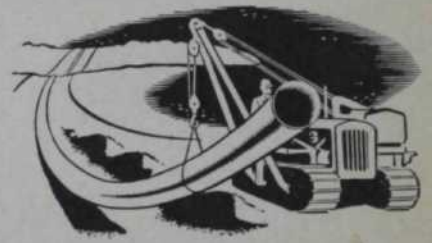
It takes a lot of PAPER to make a ton of Steel



A Steel War—Today, mention of "steel" immediately suggests war materials . . . tanks and guns . . . subs and ships . . . jeeps and ducks. It takes steel to build these mighty weapons of war. Sure—but it takes a whale of a lot of PAPER to make the steel.



Through the Mill—If you ever made a tour of a steel mill you know that paper ingredient-guides control the formula . . . open-hearth paper charts control the quality . . . production records keep the stock moving . . . and a thousand and one pieces of paper keep the offices running.



The "Big Inch"—Paper is used not only to produce steel but also to protect it. The new oil line—from Texas to the East Coast—was wrapped in asbestos paper before it was laid. And every day paper is used between sheets of steel to prevent rubbing and scratching.



It's Vital—Indeed paper is indispensable to the steel industry—and every industry. It takes paper to produce our food and clothing . . . homes and furniture . . . products of peace and implements of war. It takes paper to fight the battles and win the victory.



Make it Stretch—Due to the shortage of manpower, it is estimated that only 75% of last year's pulpwood will be cut in 1944. That means far less paper pulp. For this reason you are urgently asked to stretch your paper supply as far as it will go.

Kimberly-Clark Corporation, Neenah, Wis.

WARTIME *Levelcoat**

The fact that most people have perceived no difference in wartime Levelcoat Printing Paper is a real tribute to the Kimberly-Clark research men.

For it is through their ceaseless efforts that new discoveries and alternate ingredients are helping produce the highest quality Levelcoat Printing Paper it is possible to make under wartime restrictions and limitations.

*TRADE MARK

regiment and unduly restrict free enterprise and free effort and if we block the path of "the boy from across the tracks" to attain through his own efforts the highest position in the land.—Harold V. Coes, president of the American Society of Mechanical Engineers.

THE AVERAGE woman's vocabulary is 750 words—it's a small stock, but think of the turn-over.—Sidney Walton, English author.

Are stockholders people?

WE TOUCHED a tender spot last month by publishing Edward M. Thierry's amusing article, "The Unpredictable Stockholder." The average stockholder, said Mr. Thierry, takes a dismal view of most things except dividend checks, refuses to read company reports, and writes to management about company affairs only when he is angry. Judging from the requests we've had for reprints of the article, this size-up of stockholders struck a responsive chord in a good many management breasts.

The stockholders have their champions, however. For instance, Chester C. Oberly, president of the Tokheim Oil Tank and Pump Company of Fort Wayne, Ind., writes that "the reaction that you get from stockholders is just like anything else; their interest is about directly proportionate to the interest that management takes in keeping the stockholders acquainted with the essential facts concerning the business which they are entitled to and in which they would be interested."

I believe that if a little greater concern was evidenced on the part of management in keeping their stockholders informed, that they would receive a better stockholders' interest than is evidenced in the article referred to in the last issue of NATION'S BUSINESS.

Mebbe so. We decline to take sides. It's interesting to note, though, that, although we've had a lot of correspondence on this subject from management men, we haven't had a single protesting letter signed "A Stockholder."

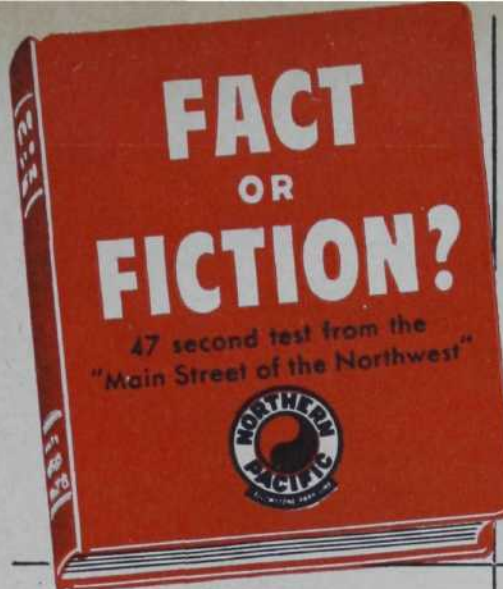
End of war note

A SUBSCRIBER in nearby Maryland—the State which has produced the famous Hagerstown Almanac for 100 years—knows the end of the war is near. He says a filling station attendant wiped his windshield this morning.

Man as is

IN HIS delightful "Memoirs of a Superfluous Man," Albert Jay Nock records what he terms "Epstein's law," which is that "man tends always to satisfy his needs and desires with the least possible exertion." Or, to put it more bluntly, men in the mass are forever looking for something for nothing. We doubt that this dismal view of the human race has the force of natural law, but a great deal of historical support can be mustered in its behalf.

Perhaps Chief Justice Jay had some-



Q. Beet juice helps give apple pie a la mode its taste appeal. Fact or fiction?

A. Fact. A lot of America's sweetening now comes from sugar beets. Northwest growers last year shipped nearly a million tons via Northern Pacific Railway.



Q. Famed elephant "Jumbo" weighed as much as a modern locomotive. Fact or fiction?

A. Fiction. Giant Mallet locomotives, 87 times as heavy as Barnum's mammoth elephant, now speed vital materials over the Northern Pacific Railway.



Q. Paper on which newspapers are printed is made from imported rags. Fact or fiction?

A. Fiction. Newsprint is made from wood pulp. More than enough is shipped yearly via Northern Pacific Railway to wrap a 5-foot strip around the world.



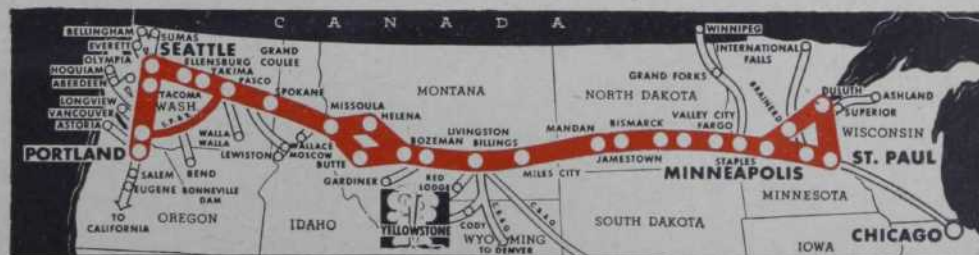
Q. Grand Coulee Dam power could boil 48 billion eggs a day. Fact or fiction?

A. Fact. Power from Coulee, Bonneville and other dams served by Northern Pacific is building a vast new industrial empire in the Pacific Northwest.

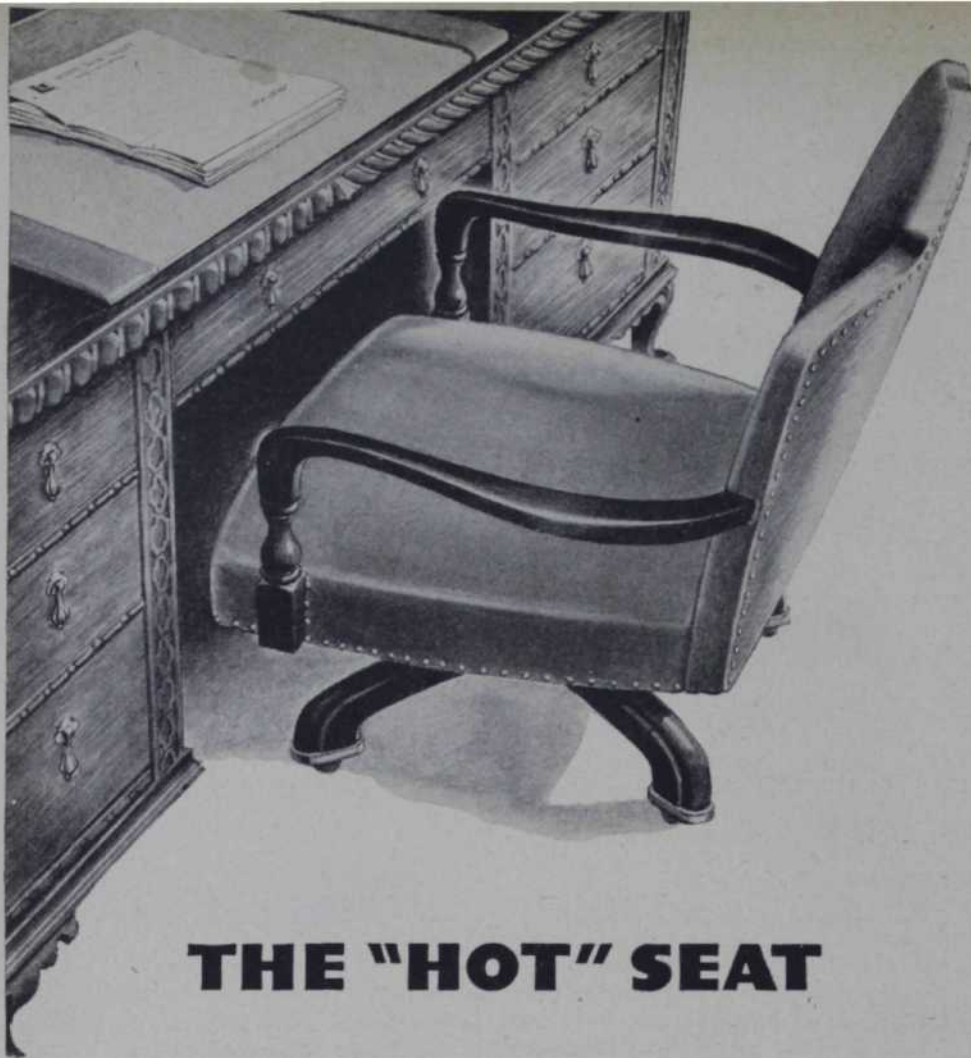


Q. There's a parade every day along one Northwest "Main Street". Fact or fiction?

A. Fact. A parade of war supplies moving over Northern Pacific, called "Main Street of the Northwest" because it links more of the Northwest's populous centers.



NORTHERN PACIFIC
MAIN STREET OF THE NORTHWEST



THE "HOT" SEAT

The man who has to plan and control the financing of a business is sitting in the "hot" seat.

Taxes, re-negotiations, labor, material and conversion costs add up to a new version of "capital punishment."

If they are currently putting a strain on your resources, we can supply additional operating cash in any required amount.

We are also ready to serve you, as we are serving others, with an engineered financing plan to:

1. Purchase other companies.
2. Buy out partners, officers or stockholders.

3. Retire bonds, mortgages, preferred stock or long-term loans.

In almost any situation, Commercial Credit is prepared to assist you on quick notice, without red tape, restrictions or interference with management.

Whether you require thousands or millions, we will welcome your inquiry and work out plans and terms that will be mutually profitable.

Our complete services are described in a new booklet "CAPITAL SOURCES." If you didn't receive a copy, write.

Commercial Credit Company Baltimore

Subsidiaries: New York Chicago San Francisco Los Angeles Portland, Ore.

CAPITAL AND SURPLUS MORE THAN \$68,000,000

thing of the sort in mind when he wrote, ten years after the Constitution was drafted, that

I do not expect that mankind will, before the millennium, be what they ought to be; and therefore, in my opinion, every political theory which does not regard them as being what they are, will prove abortive.

It may be that the millennium has arrived, or is within reach. Many of our plans for making over America and the world appear to be based on such an assumption. If it's wrong, and it turns out that basic human traits haven't changed much over the centuries, we'll learn it the hard way, as we—and our ancestors—always have.

"Little Steel," what next?

FROM a welter of claims and counter-claims, the public probably has drawn a vague notion that living costs have zoomed skyward out of all proportion to wages. It's doubly significant, then, to note that the Department of Labor's own official figures show the reverse to be true. (See Page 72 of this issue for detailed analysis.)

The fact is that both weekly and hourly earnings of industrial workers have increased faster than the cost-of-living index as compiled by the Department of Labor. The "Little Steel" formula has been effective chiefly when applied to straight-time wages. It has not acted as a restraint upon either hourly or weekly earnings—which determine how much the worker takes home in the pay envelope.

Much of the argument on behalf of subsidies, price ceilings, wage increase demands and the like is based on the proposition that earnings have failed to keep step with living costs. And if that proposition falls to the ground, where do we go from here?

"Don'ts" for A. D. 2,000

TODAY'S MOST important educational task, says Dr. Nicholas Murray Butler, is to teach an understanding of the present and a comprehension of the possible tomorrow by an accurate knowledge of yesterday.

This is sound advice for all ages. It ought to be written down and placed in a time capsule, along with a history of the world for the last quarter century. Future generations would thus be assured a dandy guide to what they shouldn't do.

Limit to everything

THERE'S a restaurant "down east" that knocks ten cents off the checks of customers who carry their dishes to the kitchen and wash them. A surprisingly large number of diners accept it as a sporting proposition, and the breakage is said to be very slight.

The fellow who told us about it said he didn't mind the dishwashing, but would have to draw the line at eating his own cooking, in the interest of out-living the duration.



WHY RAYON MAKES BETTER SYNTHETIC RUBBER TIRES

RAYON CORD, which has proved its worth in tires made of natural rubber on all the war fronts of the world, is now proving even more valuable in tires made of synthetic rubber.

The reason?

Synthetic rubber generates heat faster and dissipates it more slowly than natural rubber. Rayon yarn has the property of heat resistance to a surprising degree. Rayon tire cord retains more of its strength at the high running temperature of a synthetic rubber tire. It therefore increases the strength and life of the tire.

The story of the development of a special rayon yarn for tire cord goes back to 1936 when American Viscose Corporation established production of high-tenacity

rayon yarns to meet tire manufacturers' specifications. Then, tests by a prominent bus line resulted in 300,000 miles on a set of rayon-cord tires with seven retreads!

American Viscose rayon yarn for tire cords is especially engineered for high tensile strength and sufficient extensibility to distribute the load throughout the tire carcass. This means that the tires are better able to withstand shock and resist blowouts. What is equally important is that, when rayon is used, material savings can be made in the use of rubber.

At present, high-tenacity rayon for tire cords is reserved exclusively for the armed services. When peacetime production is resumed, this development will mean added benefits in safety and economy in your driving.



AMERICAN VISCOSE CORPORATION

Producer of CROWN Rayon Yarns and Staple Fibers*

Sales Offices: 350 Fifth Avenue, New York City 1; Charlotte, N.C.; Providence, R.I.; Philadelphia, Pa.

★ BUY UNITED STATES WAR BONDS AND STAMPS ★

*Reg. U. S. Pat. Off.

Copyright 1943—American Viscose Corporation

This Little Pig Goes to Market

FASTER and BETTER

BY TRUCK-TRAILER

Not only this little pig, but two-thirds of the tonnage of America's hogs, cattle and sheep go to market by motor transport . . . a vast proportion of them by Truck-Trailer.

Always essential for our national sustenance, this service is still more vital now that our meat production has jumped nearly 20 per cent and we have our far-flung troops, as well as the workers at home, to feed.

Why are Truck-Trailers preferred for livestock hauling? Because they do a better job for the farmer, the packer and the consumer. Consider the typical service of Parkway Transfer, of Elgin, Illinois.

Parkway's fleet of Fruehauf Trailers carries livestock from corn-belt farms to the Chicago market, giving day and night service around the calendar. Whether farmers have a few head or hundreds of animals, the stock can be loaded at the barn, hauled to market and unloaded in a few hours . . . less time than it would

take to order and spot a rail car. Then, too, Trailers carry the stock with less shrinkage and bruising. And there's seldom any cost for feeding in transit.

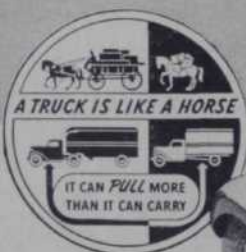
Ninety average hogs, or sixteen steers ride in Parkway's 24-foot Fruehauf Trailers. These loads, about 20,000 pounds, are pulled by economical 1½ to 2-ton trucks . . . a big money saving.

Moreover, these Trailers do a two-way job . . . and thus give farmers greater service and Parkway added profit. Return trips carry agricultural limestone, feed, supplies, feeder stock, etc. Between trips to market, they haul soybeans, corn, etc., from surplus areas to mills or feedlots.

The livestock industry is only one of the more than 100 lines of business in which Truck-Trailers are doing hard jobs more efficiently.

World's Largest Builders of Truck-Trailers

FRUEHAUF TRAILER CO., Detroit



FRUEHAUF SERVICE

Keeps Trailers Running!

Trailer operators know that Fruehaufs require little service attention, but when it is needed, there's a Factory Branch Service Station conveniently close. Fruehauf maintains the only nation-wide Trailer service organization, with fully equipped shops and complete parts stocks in more than fifty strategically located cities.

**BACK THE ATTACK!
BUY WAR BONDS!**

FRUEHAUF Trailers

"ENGINEERED TRANSPORTATION" REG. U. S. PAT. OFF.

TRUCK-TRAILER TRANSPORT IS DOING AN ESSENTIAL JOB FOR ALL AMERICA

Meat IN AMERICA!

The annual per capita consumption of meat (excluding poultry) in the U. S. during the past decade has been about 130 pounds.

The allotment of meat for each American soldier, sailor and marine is 410 pounds per year. In 1941, nearly 8½ million tons of meat animals were shipped to market by motor transport.

There are many regular, profitable Truck-Trailer livestock hauls up to 1,000 miles or more. Motor transport must be kept running . . . parts, tires and replacement vehicles must be available.

MANAGEMENT'S

Washington LETTER

A last minute roundup by a staff of Washington observers of government and business

MANAGEMENT'S MAJOR PROBLEM IN 1944:

Adjustments in war production revised and shifted monthly—increases in a few lines, sharp cut-backs in many.

Over-all total for first quarter will be only fractionally greater than last quarter of 1943. Re-gearing of whole schedule is due to military strategy approved at Cairo-Teheran—more air power and then MORE air power!

War plant now fully placed and tooled. Construction of all kinds in first quarter will be barely one-third '42 rate and only half of '43 monthly dollar volume.

Basic materials are already available for limited production of some civilian items—steel, copper, aluminum, secondary rubber; and man-power pinch has passed peak.

Partial resumption of normal production in selected industries—particularly business trucks—will be jagged and often painful, as was shift to war programs in '41 and '42. Many plants still loaded with war work will see competitors freed for controlled civilian production.

Unwinding WPB industrial controls foot by foot will place big premium on alertness and agility of management—ability to move in quickly, to finance opportunities, to lick official indecision in Washington bureaus. In many lines enterprise—up-and-at-'em American "know-how"—will carry '44!

► Collapse of Nazi military machine in 1944 is basic unwritten assumption of all economic forecasts in government-control agencies—most likely in third quarter, according to majority of surveys and reports guiding official policy.

Washington officially brands as a "silly delusion" the idea that Japan

will be a "pushover" after Germany is knocked out. "Only a major military effort—a big war—will bring Japan to her knees."

But, with plant capacity built, Japanese war will demand only about one-fourth of 1943 military production, as measured in total industrial man-hours.

► Sharp revision of War Labor Board's policies and procedures will be forced by Congress after Smith Committee reports to House.

Committee has investigated WLB rules as applied over two-year period; has found confused, conflicting—often uncertain—decisions actually generating labor-management frictions.

Granting of partial "grievance recognition" to unions not formally certified as majority organizations, tends to force closed-shop in non-union plants, Committee finds.

WLB indicated to House investigators three months ago that war powers would not be stretched to accomplish steps specifically forbidden by Congress in the NLRB Act; but formal declaration of new policy has not been issued.

Last report to Congress shows a WLB backlog of 15,260 undecided cases on docket, the smallest number since March, 1943. This docket, with new applications coming in at rate of 13,500 monthly, is cause of WLB's difficulties.

Many WLB rules are viewed by Committee as harsh, hasty, crack-downish; often imposed by intimidation, official coercion.

Threat of presidential plant seizure often is waved club-like by WLB agents in their preliminary conferences.

Smith Committee is cataloguing WLB "excesses" in same manner as OPA's in November report; demands basic judicial protections against over-zealous administration of war powers.

► Job-preference for war veterans in fields of usual employment soon will be organized and stimulated by Washington.

Congress has taken cognizance of fact that 800,000 army-navy men have been discharged since Pearl Harbor—mostly minor disabilities.

All rehabilitation programs and veterans' employment services will be pooled under Veterans Administration—not a revived NYA.

McNutt's plan to handle veteran placements through draft boards was vetoed by

Congress; Selective Service must be disbanded when war job is finished!

Capitol Hill is on guard against tendency of some war agencies to plan elaborate "reconstruction" programs reaching far into post-war years.

Byrd Committee on excessive federal expenditures demands, on other hand, immediate curtailment of 300,000 in bureau payrolls; looks to reduction of 2,000,000 in federal personnel after war. (Total civilian payroll now more than 3,300,000.)

Pattern of bureau reduction will first emerge in appropriation bills for fiscal year 1945, on which House begins labors in January '44.

► Food subsidies apparently are to be continued on month-to-month basis. Senate majority is opposed to subsidies as fixed policy, but has yielded to pleas of War Mobilization Director Byrnes not to dislocate entire price-control machinery by mandatory repeal of all consumer subsidy authority now.

Expected compromise calls for a 40-day extension of present authority; then another subsidy debate.

"Subsidizing inflation!" opponents cry.

But whole price control program is a battle against time. Economic General Staff (Byrnes, Vinson and Marvin Jones) anticipates that by holding the line for 60 days more they can demonstrate to all the practical wisdom of subsidies.

Senate majority is far from convinced, but will go along reluctantly, out of deference to former fellow-member Byrnes.

Byrnes, in return, indicates that recent renewal of up-trend in wages will be halted if subsidies continue on trial basis.

Weighted for increased living costs, average weekly earnings of factory workers from January 1939 to July 1943 increased by 48.5 percent—the net increase in terms of purchasing power.

► OPA also will help business absorb some of the current pressure on prices, by allowing smaller packages, reduced percentages of higher-priced ingredients, in some products—but not foods or drugs, where packaging formulas are regulated by law.

Recent paper order officially sets forth OPA's reduced-quantity method:
"Because of two \$4-a-ton increases in

newsprint paper during 1943, OPA today authorized a reduction in the number of sheets in tablets, pads, and related products made from newsprint paper, so that production and sale of these items may be continued at prevailing ceiling levels."

This approval of smaller packages came, by the way, two days after OPA's Kansas City regional office had entered suit in the Federal Court to restrain a candy manufacturer from such action to offset higher ingredient costs.

Administrator Bowles is pressing hard to bring regional administrative and legal decisions into line with Washington orders and declarations. New weekly policy guide to all regional and district offices will be inaugurated in January. Hitherto denied, these weekly policy sheets may be released to Chambers of Commerce, trade associations and similar service organizations.

► Background of Senate Interstate Commerce Committee's determination to write bill codifying—and relaxing—federal hold on radio broadcasting:

Supreme Court decision last May (by Frankfurter) sustained FCC in its broad interpretation of control powers. Under this judicial sanction Chairman Fly has asserted FCC's right to supervise content of commercial programs, to inquire into rates and charges, and to prescribe standard forms and methods in station accounting.

Senators insist freedom of radio is strictly analogous, in political and social implications, to freedom of the press.

Frankfurter-Fly interpretation, Senate suspects, ultimately would lead to absolute and all-embracing government management of entire radio communications system.

Broadcasting companies, practically, would be commissioned as agents of government.

Willingness of broadcasters to yield to special wartime requests of government has facilitated recent encroachment by FCC.

Senate sponsors of codified radio law assert failure to accomplish such a measure by June of '44 might risk virtual closing of radio channels to all political opposition in 1944 presidential campaign.

► Coal shortage will be most difficult in January-February.

Late December reports showed 1943 bituminous production of 580,000,000 tons; at least 30,000,000 tons under actual consumption and exports; stockpiles reduced to 35 days' average consumption—60,000,000 tons. Pinch is most severely felt by retail distributors.

Record production, despite strikes, winter transportation slowdowns, and faltering government control policies, still leaves prospect of "an increasing deficit" this year, even at higher prices.

Industry experience indicates that, percentagewise to industrial activity, '43 stockpile was not out of line; could be safely larger in '44. Outlook: plenty of work ahead for the coal industry all year.

Oil picture some brighter; transportation situation licked; immediate problem is stimulation of new discovery. That's the purpose of bill passed by House last month to advance crude prices; but legislative difficulties with hold-the-line directive still anticipated.

► Uniform clause for terminating war contracts has been approved tentatively by Army and Navy, and is circulating on Capitol Hill for appraisal.

Army has prevailed in view that settlements should not include fixed percentage of profit on cancelled portion of contract.

This reverses former navy position, which allowed negotiated profit margin on all uncompleted work.

New policy means, if you have partly finished a contract, you get a pro-rata profit. But, if you invest in materials, tools, engineering and contract is cancelled before production, you get back only your actual costs—no pro-rata profit.

Neither does the projected uniform termination procedure yet reach to the sub-contractor; Senate Military and Small Business Committees still insist final program should cover sub- and sub-sub contractors.

► Shipping space to Latin-American Republics is approaching adequacy for '44. More goods will move both ways.

Normal mechanisms of free enterprise will begin to function in all trade lines save those developed on exclusively emergency basis.

Office of Foreign Economic Administration has abandoned space controls on

U.S. flour to 15 Good Neighbor countries, effective January 1—only a beginning toward a general formula.

Two restrictions remain: (a) that total shipments to each country be limited to actual needs, (b) that "blocked" Latin firms still be denied access to U.S. foods.

These controls to be applied through Flour Millers' Export Association, a joint agency set up to pool shipping in submarine days.

► Proposal to take federal Government out of farm real-estate business is being pressed by House sponsors of veterans' rehabilitation program.

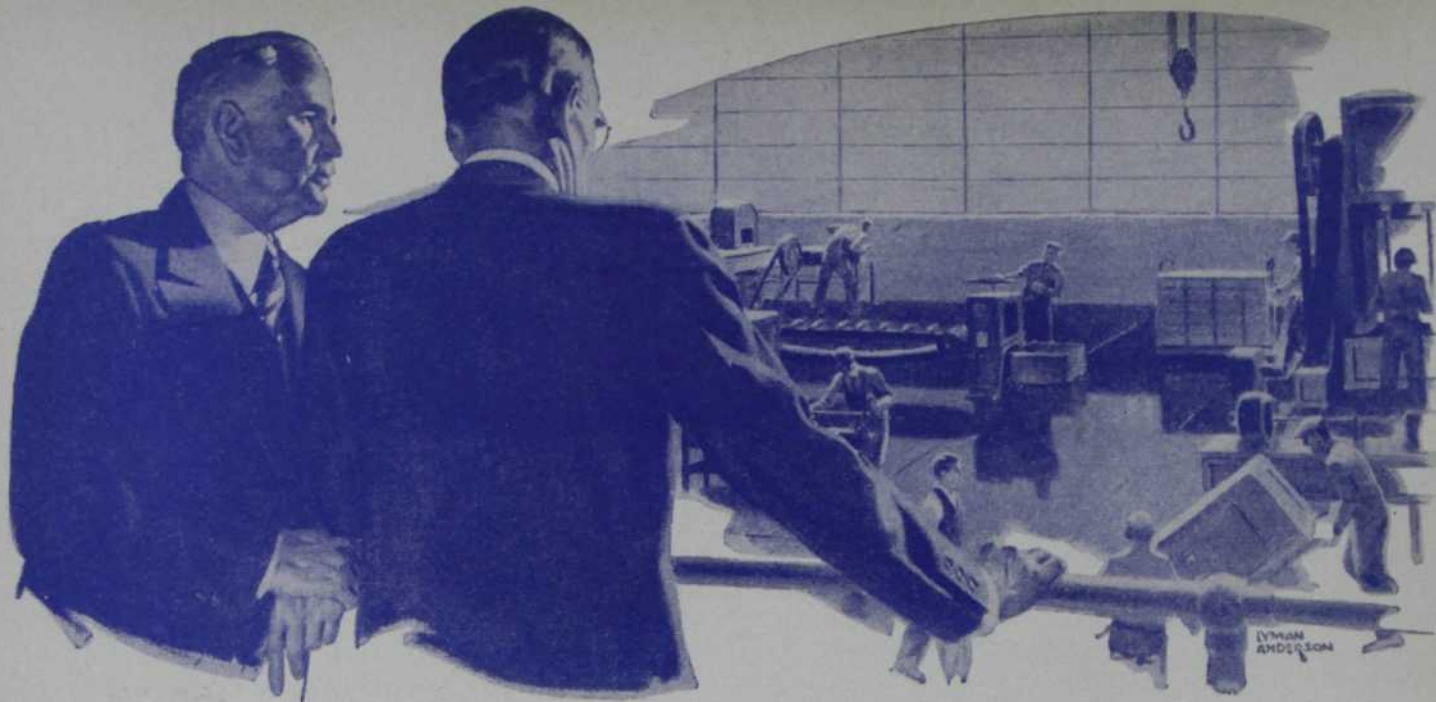
Farm Credit Administration and Farm Security Administration hold many thousands of farms possessed on delinquent loans. Veterans Administration would buy them for grants to discharged heroes electing to settle on family-farms.

► Allocation of motor trucks to civilian business applicants presents a special WPB-ODT problem; experienced production engineer is sought to assign limited monthly output to most acute needs; 1944 priorities routine is involved—to screen really necessary replacement demand.

WPB has allocated 123,000 new civilian trucks for '44; production assigned to practically all standard manufacturers; total about evenly divided between light commercial, heavy and medium transport types. (Much friction on this.)

Priority applications must be filed at one of 142 ODT district offices. Those approved will be forwarded to Washington ODT; then to WPB; finally back to WPB field office. Purchaser presents approved priority with order.

WASHINGTON BUSINESS BRIEFS: Timber men are worried over heavy premature cutting of second-growth; say war demand may be undermining "economy of abundance" for years to come....WPB men talk guardedly of an aluminum glut; heavy stockpiles; excess scrap; but manpower lacking for more civilian manufacture....Political realists here take little stock in rampant "third party" chatter....Post-war monetary talk veers more and more to some resumption of modified gold standard....Navy got its own colored films of historic Tarawa landing back to Washington in ten days; learned much; released some footage to public 12 days after battle!...Santa Claus got his foot in the door at OPA when Bowles relaxed rules against gifts of rationed foods.



WHY MORE EMPLOYERS ARE ADOPTING *Employee Pension Plans*

A suitable pension plan, soundly financed through trusts invested in insurance company contracts and/or securities, establishes more stable, more satisfactory employee relations. Here's why, logically—

1. It relieves employees from worry about *financial security* in old age by providing benefits supplemental to social security.
2. It provides automatic retirement which keeps the *avenues of promotion* open to younger employees.
3. It affords an *effective financial consideration* for employees without increasing free spending power — coinciding with governmental anti-inflation measures.

Such a plan creates an impelling incentive for long-time loyal service, increases efficiency and decreases turnover, thus reducing payroll costs.

Our 92-page summary entitled "Pension, Bonus and Profit-Sharing Plans," covering the fundamentals of formulating and financing employee benefit plans, is now available. There is no obligation entailed in writing for this study or in discussing your case with us. So do it now and have the facts when you need them.

THE CHASE NATIONAL BANK
OF THE CITY OF NEW YORK

Pension Trust Division

11 BROAD STREET

Telephone HAnover 2-9800

NEW YORK 15

The Spirit that Quickeneth

THERE are intangible elements in the operation of a business which textbooks and national blueprints do not comprehend. Perhaps it is impossible to do so. Things of the spirit are like electric currents, little understood, yet all powerful. Latterly, we have come to lump them as psychological factors. We speak of a "psychological slump," "market loses confidence," "rumors of peace send stocks down." The state of our mind even measures in fractions of a dollar our daily estimate of the state of our Government's credit.

One daring effort to fix a money value upon these intangibles is the accountant's item of goodwill, which attempts to appraise the mental attitude of customer and supplier toward a business unit.

But no one has, and doubtless no one can, define and evaluate those intangibles in the business life of a nation which animate, stir, spur and impel the exchange of goods and services. This is unfortunate because it, the spirit—not dollar signs, pig iron production, kilowatt consumption, or bank clearances—giveth life.

Last month on this page it was suggested that in our postwar planning we pay some attention to an intangible, to the creation of desires which lie back of demand, which, in turn, lies back of production. A reader writes:

The "exciters" you describe are the forgotten men of our famed standards of living. Without their constant pressure upon us we should slip back. . . . And there is another group which we should recognize and encourage, the men and women who put up their savings and thus give management and workingmen the chance to do their stuff. Is any Planner today giving any place in his Plan to the risk dollar?

Of course, the reader is right. Most of our thinking envisages a future in which every man

has a job. That requires each of us to produce something, in goods or services, which some one else will desire and exchange his labor for. But, after the desire for that something, there must then be the facilities for the production, a place to work, and tools. To provide a man with a job in America is first to provide \$5,000 worth of equipment. That is the average per workman.

These dollars come from the pockets of men and women who consumed a little less than they produced. They are sacrifice dollars. They are a certificate of credit, a token of work done, not to be exchanged immediately, but at some later time.

What was the state of mind which animated millions of us between 1900 and 1930 to risk \$100,000,000,000 of our savings in new industries and in the expansion of old ones, which, at the end of the period, found one-third of all our workers owing their jobs to this new venture money?

We must strive to reproduce the atmosphere, the environment, of a risk-taking America. The test of any plan, or any part of any plan, should be: Does it fit into a climate, political and economic, which develops the daring and creative spirits of industry and commerce? Does it openly acknowledge the contribution of those silent partners of the nation's business, who provide from their savings the funds for an enterprise, but, more important, by so doing provide a stimulating example of faith and confidence in the country's future?

Intangibles, yes, but of such is the substance of national well-being.

Merce Thorne

**NO OTHER SYNTHETIC RUBBER
TIRE OFFERS YOU THESE
ADVANTAGES**

1—Twenty years' experience in producing and manufacturing synthetic rubber

2—Tough, sturdy carcass of Supertwist cord, built to prewar quality

3—Tested non-skid safety from time-proved Goodyear tread design

4—Maximum wear from scientific Goodyear design that keeps tread under compression

5—Greater "know-how" evidenced by Goodyear's record in building more than 350,000,000 pneumatic tires—millions more than any other manufacturer



**BUY WAR BONDS
TO SPEED VICTORY**

Offered as "The Finest Example of the Art"

YOU see pictured here one of the outstanding "impossibles" accomplished by American industry under the pressure of war.

Handsome, resilient, durable, it is the Goodyear synthetic rubber passenger car tire for essential civilian use.

In its sinewy spring and strength it surmounts the appalling difficulties of seeking to rival in 24 months the results of an entire century of natural rubber lore.

It comes in the nick of time, its

merit measured by merciless test, and is offered as today's finest example of the art of synthetic rubber tire manufacture.

Back of this tire, back of all that science, industry and government can now put into it, are the matchless skill and experience of the world's largest rubber company.

Back of it are the lessons hard-won by Goodyear in successfully building for the Army the first tires made entirely from synthetic rubber produced in the new government plants.

Back of it are technical standards that have made "more people ride on Goodyear tires than on any other kind"—and the vigilant helpfulness of Goodyear dealers, the foremost tire service organization on earth.

Properly used under current driving conditions, this superb new Goodyear ought not merely to meet your wartime needs but should satisfactorily serve you for years.

Listen to Goodyear's

"HOOK 'N' LADDER FOLLIES"
NBC Saturday Mornings

See your local paper for time and station

Supertwist—T.M. The Goodyear Tire & Rubber Company

GOODYEAR

THE GREATEST NAME IN RUBBER

Another reason for choosing Goodyears

177,810 YEARS OF EXPERIENCE—AT YOUR SERVICE

Next to quality, competent service counts most in getting full performance from tires. Goodyear dealers comprise the largest, most efficient, veteran tire service group in the world. 419 of them have represented Goodyear 25 years or more, 1,269 for 20 years or more, 2,594 for 15 years or more, 4,268 for 10 years or more, 12,073 for 10 years or less—a total of 177,810 years of experience to serve you in conserving the tires so essential to keeping America mobile.



This Is Worth **WORKING** For!

By **ERIC A. JOHNSTON**

President, U. S. Chamber of Commerce



REMEMBER mass unemployment?

That specter of the depression 'thirties again is haunting the minds of the American people. It is the second of two great emotions stirring people from ocean to ocean—the first, of course, is their desire to win the war as quickly as possible.

But, after final victory, what comes then? That question is being translated into personal terms. Terms like: What kind of a job will I have? What continuity of employment will there be? What will be my weekly pay check? Will there be jobs for us all?

The kaleidoscopic maze of postwar problems serves only as a backstage drop to the animated actor upon whom all eyes are focused—employment.

Mass unemployment is the most insidious, the most devastating, malady of our generation. History reveals that, when a civilization struggles indefinitely with a problem which it is unable to solve, that civilization disappears. We have not yet solved our employment problem. We can solve it only with unity of purpose, and with unity in action.

Today the world is caught in a chaos of violence and hatreds. There are wars between nations, conflicts between groups within nations, misunderstandings even among allies.

For that reason, the key word of our time, whether at home or abroad,



EDWARD F. WALTON

is unity. It is the word that holds the one great opportunity for a decent, peaceful, prosperous existence for the masses of mankind everywhere.

Not even the booming of cannon and the explosion of block-busters can drown out its syllables. Though the ears of mankind be filled with the din of destruction, its heart catches and hoards the echo of that hope.

It has long been my view that the things which countries—and economic groups—have in common, the things which should, but, alas, do not, hold them together, are much greater than the things that divide them.

Consider things in common

THE great mischief in human relations has derived from the fact that we tend to emphasize differences by overlooking common interests. Half the suffering and horror that flow from conflict could be avoided if we made a deliberate, conscientious effort to chart areas of agreement before attempting to straighten out the difficulties beyond these areas.

An impressive demonstration of this principle has been made in the Moscow Agreement of the United States, Great Britain, Russia and China. No one in his senses is unaware of the differences of view and interest that separate these nations.

They live under different social

systems. They harbor overlapping economic and territorial ambitions. They have a background of mutual suspicions. It would be easy to list a thousand and one problems which represent barriers to cooperation among these four great powers.

What would have happened if the negotiators had started by exploring those differences and attempting to settle them? The conference would have ended before it began. The leaders of these nations, however, wisely chose to ignore differences and to concentrate on areas of agreements. And, amazingly, it appeared not only that those areas were as vast as continents, but they could be readily identified, mapped and accepted by all concerned.

Despite all their variety of experience and objectives, the four major powers of the United Nations found the element of unity that joins them. This represents as great a victory as any that has been won on the battlefields. They have struck the chord of cooperation.

In the critical years ahead these four great nations will represent four pillars of stability. If they can stand up in the inevitable storms of self-interest, a third world war can be prevented for many generations—perhaps forever.

Peace requires cooperation

THIS stability will give them a solid foundation upon which to build international trade. The exchange of goods and services among the countries of the world will give an opportunity for nations to raise their standard of living through industrialization. This will give America an opportunity to assist in giving backward nations an inward impetus upward.

Cooperation is even more essential for domestic peace. The need for a four-fold unity abroad is paralleled by the need for a four-fold unity at home.

American civilization is by this time so complex, so interdependent, that its separate parts run into the hundreds. Yet it is possible to delimit the four main elements. These are management, labor, agriculture and government.

It would be Pollyanna nonsense to assert that there are no conflicts of interest, no deep and fundamental differences among the four. Yet it is a practical fact that the things which join them and make them one are a thousand-fold greater than the things that divide them.

At home, as in international relations, our paramount duty is to map the areas of agreement among all four major factors of our national

life. If the effort is undertaken in a spirit of cooperation it will appear quickly enough that the common interests are overwhelmingly more important than the cleavages.

The sinister doctrine of class struggle stems from Karl Marx. It is credited to radical extremists, but there are a great many representatives in all of these four elements of American life who accept this doctrine—not in words, but in actions.

They behave on the assumption that the interests of each are irreconcilable to the interests of the others. There are demagogues aplenty in each group who empty their vials of wrath upon the other. It is this irreconcilable spirit which they carry into the conference rooms and onto the rostrums of public opinion.

Conflicts should be cured

WE MUST learn to start with the opposite assumption—that cooperation is normal and conflict is a kind of aberration to be cured before it makes too much headway.

There are dangerous years ahead of us with multitudinous unsolved problems, divergent interests and almost insuperable difficulties. We shall meet their challenge only if we grasp at the outset that all Americans—whether in management, labor, agriculture or government—fundamentally desire the same thing. Each of these groups has a stake in the American system.

We must understand that we will all go up together to higher levels of well-being, or we will all go down separately into our respective sorts of bankruptcy. Ahead of us is either collapse in compartments or a joining unity of purpose to solve the problems of tomorrow.

And what has all this to do with solving unemployment? It has everything to do with it. Why should anybody hire another person? Only because somebody else wants to buy, and can buy, the product of his labor. Employers do not create employment. Consumers do. We can give consumers more power to buy only by constantly selling products cheaper so that they can buy more with the same dollars than they bought before.

We can sell things cheaper only by doing our jobs better. This applies to management, labor, agriculture and government. Those who work with their brains and those who work with their hands must produce more, better in quality and cheaper in price.

Management, in a spirit of unity, must understand that labor unions are here to stay; that we must have lower and lower profit per unit and bigger and bigger volume of sales; that high wages are important if

based on a correspondingly high level of production; that the umbrella of monopoly is held up over the heads only of those who are frightened—frightened by their own inefficiency.

Labor, in this same spirit of unity, must remove any acts or policies which restrict or retard production. Labor organizations must be more free, more democratic, more social-minded. Labor must clean its own house of those abuses which have crept into some of its organizations.

Agriculture must recognize the necessity for constantly lowered costs and greater efficiency. Agriculture must realize that an economy of scarcity is an economy of ruin, that a prosperous management and labor are essential to absorb the production of the farm.

Government must understand that by taking a dollar from somebody and handing it to somebody else it does not increase purchasing power; that the individual should be stimulated to his greatest productive capacity; that there should be revision of tax laws to stimulate the investment of capital to give jobs to men; that we must have the maximum amount of private enterprise and the minimum amount of government regulation.

Unity will bring progress

THIS type of unity, this type of cooperation, among the four elements of our society, will mean that we are on the threshold of America's greatest development.

With this unity we will bring into being in America a greater middle class society with fewer people at the top and fewer at the bottom and more in the middle.

More people will have the opportunity to own their own homes, buy electric refrigerators, radios and washing machines, and other things which add to the joy and comfort of living.

Could such an America, a great middle-class America, ever go totalitarian? It could not. Such an America will preserve political democracy and economic opportunity and private initiative.

We have been through an "Alice in Wonderland" of conflicting theories that even "Tweedledum" and "Tweedledee" have been unable to explain. We need no astronomers or crystal gazers or "looking through the looking glass" artists to understand thoroughly what we in America want.

We want first of all to win the war. Afterwards, we want employment, economic opportunity, freedom and liberty. We can get what we want only with unity of purpose and unity in action.

Scraping the Bottom of the Bin

By LAWRENCE SULLIVAN



FOR EVERY American family the pinch on basic food supplies promises to become increasingly difficult throughout 1944.

Given bountiful harvests, we shall all have ample basic nutrition at a standard somewhat lower than that of 1943, just as 1943 was slightly below 1942.

But our margin of food reserves at present is so narrow that any considerable crop failure over a wide area almost certainly would compel a general revision of the 1944 food program to a level somewhat below the present estimate, as calculated from normal yields. In short, we are banking on hitting the jackpot for a third

DIFFUSED wartime government controls impede maximum production and smooth distribution of food when the world is relying on American resources

successive year in Nature's Hall of Wonders.

Two broad considerations summarize our current food picture:

First, total 1944 production of all U. S. foods combined will be somewhat smaller than 1943 and considerably smaller than the bumper year 1942—principally because of the manpower shortage in the agricultural regions, partially because of limit-

ed and often unequal distribution of farm machinery and repair parts.

Second, military and lend-lease demands will be greater, requiring approximately one-fourth of our total *anticipated* food supply.

A sudden and unexpected peace in Europe would change our food picture only a little because Washington estimates that foreign relief and re-

habilitation shipments during the first year of peace will exceed maximum war-time demands on American food resources.

For these reasons, our 1944 victory gardens will be a far more important factor in total food supply than last year. In 1943 victory gardens gave production equivalent to 15,000,000 acres, or about five times the normal potato acreage of the entire country! A more intensive development of victory gardens this year would go far toward eliminating distressing food shortages in many areas. Home-canning, preserving and processing on an expanded scale also would ward off threatened nutritional deficiencies next winter in many areas.

If you wish to calculate *fruit and vegetable* requirements for your family, you may begin with the govern-

ment figure of 565 pounds a year for each person, or about 2,260 pounds a year for the average family of four. Thus every 100 pounds of victory garden production covers approximately the basic food requirements, in *fruit and vegetables*, for two persons for a month. Such calculations will enable every gardener to plan his production in terms related to actual family requirements. Don't neglect your 1944 victory garden! Our victory gardens may prove to be the nation's margin of sufficiency in food.

Six principal factors centering on federal wartime controls dominate the 1944 food outlook:

1. Shortage of farm manpower.
2. Inadequate agricultural machinery, including maintenance and repair parts.

3. Drastic curtailment of processing machinery, especially in meat packing, dairying, canning, milling, baking and bottling.
4. Inequitable retail ceiling prices rigidly maintained in the face of steadily advancing raw products.
5. Divided authority in food administration between WFA, OPA, CCC, OLLA, WPB, UNNRA and DPC.
6. Waste and extravagance in government food stockpiling and overseas allocations, plus the diversion of basic human foodstuffs to explosive alcohols, especially wheat, sugar and corn.

This article surveys the impact of these factors, plus the secondary influence of several subsidiary aggravations, including mileage rationing for trucks, vast withdrawals of farm lands for essential military establishments, and marketing dislocations flowing from more or less impractical attempts to limit distribution profits through price margins rather than taxation.

Farm manpower

ALTHOUGH the emergency farm labor mobilization has brought almost 75,000 additional workers to the harvests from Mexico and the Caribbean Islands, and several thousand prisoners of war have been used to advantage in the West, the manpower pinch still is limiting food production sharply throughout the entire mixed-farming area of the East and Central West. Agricultural workers still are being drafted for military service and drawn into war industries.

The shortage affects not only production on the farms but the great food processing industries—canning, milling, packing, dairy products, baking, and also principal agencies of food distribution, as jobbers, wholesalers, truckers.

Under War Manpower Commission regulations most agricultural producers and food processing workers are granted seasonal military exemptions, but these do not extend to distribution employees in the food industries. Similarly, under the WMC's regional wage control plans, basic war industries still are able to bid workers off the farms and out of the food processing plants, thus aggravating the desperate plight of those plants which have not been accorded the "essential" classification at the distribution level.

Although the military services have discharged about 800,000 men since Pearl Harbor, principally for

(Continued on page 89)

For a Surer Food Supply . . .

TO OBTAIN the fullest utilization of existing productive capacity and to eliminate the confusion which now prevails, there must be restored in the minds of farmers in general a confidence that conditions essential for production will be maintained during the period in which production is in progress. To stimulate wartime food production, we recommend:

First, the assurance, when production plans are being made, that prevailing price levels at the time products are ready for market will be sufficient to compensate fully for the expenses of efficient production, including essential labor, and in addition provide the incentive for continued production, if such is necessary.

Second, the protection of the farm labor supply from depletion through the operation of ill-considered administrative policies, and effective provision for emergency supplies of labor both from local sources and from nearby areas.

Third, the supply of necessary farm machinery to replace so far as possible the loss of manpower which has taken place and to permit needed expansion in production of food and feed crops. To this end government agencies should cooperate to insure the production of a timely and adequate supply of farm machinery.

Fourth, the centralization and clarification of administrative authority among government agencies in order to restore that confidence in the minds of farmers which is essential for maximum food production.

Department Committee For Agriculture,
of the Chamber of Commerce of the United States
ELMER H. SEXAUER, *Chairman*

The Retail Shelves of '44

By JACK B. WALLACH

DEMAND will exceed supply, prices will be high, but there will be goods available. The consumers will have money to spend, and sales will soar

TOWARD the end of last summer, Arthur D. Whiteside, director of the WPB's Office of Civilian Requirements, predicted that retail trade in the final quarter of 1943 would dip about 20 per cent under the corresponding quarter of 1942. The prediction was based on supply, production and inventory conditions as he then knew them.

Although the final story on retail sales in the last quarter of 1943 is not yet in, it is safe speculation that dollar volume will be up at least five per cent. When the well-informed miscalculate in forecasts, it is a bit discouraging to the more modest prognosticator. But, by analyzing the reasons underlying the continued rise in retail sales in 1943, it should be possible to form a picture of what the coming year may bring.

Any estimate of 1944 business must be qualified by the fact that, if the war should end, it would alter all predictions. This estimate, however, is based on the assumption that an early peace is an eventuality for which everyone hopes, but which nobody counts upon. It seems safer now to look for "war as usual" rather than even a limited resumption of "business as usual."

Business man and consumer alike may wonder how it was possible in 1943 to do about \$62,900,000,000 in retail sales—ten per cent above 1942—when civilian goods production was greatly curtailed, and retail inventories for the year averaged a decline of more than 20 per cent from 1942 levels.

The answer lies in increased purchasing power and price movements which maximum price regulations could not, or did not, halt. The so-

called inflationary margin of spending power has not been siphoned off, and available evidence suggests that it will not be siphoned off this year.

Smaller incomes are larger

TODAY, as Secretary Morgenthau recently remarked, four-fifths of all the nation's income is going to people earning less than \$5,000 a year. These people have raised their standards of living and they intend to continue to raise them.

Various sources of price indices indicate that prices in the United States have risen about 25 per cent since 1939. Actually, as every housewife knows, real prices have risen far more sharply but often by indirect routes.

Countless price ranges have disappeared entirely. Ask your wife if it is still possible to buy a \$1.95 handbag, or a \$2 sweater, or first-grade rayon hosiery at 49 cents, or \$1.09 house dresses. These and many other

High wages have raised workers' living standards, and given them the means to satisfy their wants

things, simply are not to be had. Their successors at higher prices may not be of recognizably better quality but both the merchant and the consumer are powerless to do anything about it.

Price regulation from the inception of the OPA was badly hobbled by the fact that wages were not stabilized or controlled. As wages rose, manufacturing costs were inflated, and costs of living began to increase.

In 1942, prices might have found far higher levels but for the fact that retail merchants, sensing eventualities, stocked up heavily and, through the greater part of that year, continued to sell their goods under replacement cost prices.

By the turn of 1943, retail merchants no longer could cushion the impact of higher costs. Although inventories at the beginning of 1943 generally were up over January, 1942, levels, they were appreciably lower

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FRANCE—Key to Post-War

By LOUIS MARLIO

Many people dream of and pray for a strong, democratic, postwar France. Louis Marlio believes that such a France already exists. He is qualified to speak with authority. He has had long experience with both European and American economic, industrial and engineering problems. A major of artillery in World War I, he is the author of many books dealing with French and European economic problems, and a member of the French Academy of Moral and Political Sciences. In the field

of business, he has been general chairman and manager of the French Aluminum Company, chairman of the International Aluminum Cartel, vice chairman of the French Magnesium Company and president of the French Eastern Railroad. He came to the United States in 1940, leaving three children in France, one son with the Commandos in Britain, and bringing with him his wife and two young sons. In 1941, he published *A Short War Through American Industrial Superiority*

AMERICAN business men are asking two challenging questions about France:

1. Can France come back?
2. What will be the economic and political direction of postwar France?

As a Frenchman who believes both in capitalism and democracy it is quite natural that I should consider the answer to these two questions a matter of crucial importance. I do not mean necessarily from the viewpoint of the Frenchman, but rather from the more universal viewpoint of the business man anywhere and everywhere. Before answering these questions, therefore, I should like to place them in their proper perspective.

The answer clearly involves more than France: *The way postwar France goes, the whole of Europe will inevitably go.*

My reasons for this conclusion can be seen on the map. In 1939, at the start of the war, France was, militarily, culturally and economically, the last great capitalistic power on the European continent. She was the extreme eastern frontier of western democracy. It was a vulnerable frontier, too. Europe had gone overwhelmingly anti-capitalist and anti-democratic, and France's position, without the active support of the other democracies, had become precarious. The war was shortly to prove that it had become untenable.

When France was forced to capitulate, Europe's last great power capable of exerting an influence beyond its own borders for capitalism and democracy, was neutralized.

On the other hand when the war is over, France will be in the picture



In France, personal freedom is not a doctrine one may or may not believe. It is life itself, based on risk, work and courage

Europe



THE WAR OVER, will France, with a high degree of industrialization, and an active democratic leadership, regain her place in the vanguard of world civilization?

as the largest European unit with the least disturbed capitalistic tradition. She will be in the picture with an empire, a high industrialization and with an active democratic leadership largely recruited from the middle class.

The anti-democratic forces in France are hopelessly identified with the invader and will be destroyed with him. Certainly neither Germany, nor Italy, nor Spain, nor any other large European power can be looked to for leadership in the effort to reconstruct Western Europe on a capitalistic and democratic base.

Should France go Statist or Communist, the socialization or bolshevization of the rest of Europe will become merely a question of time.

In this perspective, let's return to face the questions American business men are asking.

1. Can France come back? Without hesitation I say that France not only can come back, but that it will come back, and that its come-back will astonish the world. I base my answer on two considerations, one physical, the other psychological.

Physically, let us take the pessimis-



Statism requires silent acceptance by the people—it is not for a nation with the French tradition of free and vigorous expression

tic view that, by the time France is liberated, her population will have fallen from the pre-war 42,000,000 to 40,000,000. There are 70,000,000 people in the French colonies. These 110,000,000 people, commanding large resources, form one of the most important economic blocs in the world. American business men will be doing business with this bloc, because 110,000,000 customers and producers, sitting astride the major sea lanes and airways of the world, offering markets for goods and opportunities for investment and development, constitute an inescapable business reality. More, the far-flung French Empire provides a system of strategic commercial air bases that covers the globe. In terms of these vital commercial airways of the future, the United States commands no such system under its own flag. Thus, the United States and France complement each other, each offering the other advan-

tages that will provide a base for the closest commercial collaboration.

We are not dealing here with abstruse ideas but with the hard realities of commerce. Population, resources, skills, opportunities, strategic position—these argue strongly against selling France short.

Psychologically, any one who knows the French must know the capacity of my people for hard work, for thrift, for starting all over again from scratch with a cheerful heart, as they have had to do so often in the past. I think I know my people, and it is my opinion that they support adversity perhaps better than success, and that their great capacity for work and reconstruction is invariably stimulated by defeat.

I know the pride of my people, their pride in the great humane achievements of their nation, their pride in themselves as a free, civilized and courageous people. This complex

French pride has been mangled, and the French cannot live without their self-respect, without their just and deserved pride in themselves and in their nation. You will be astonished at the deep reserves of strength, of energy and of determination the French will show in the reconstruction of their land and empire.

I also know the deep and shrewd resourcefulness of my people even in their hour of blackest despair. I know the way the French peasant, the little shopkeeper and the small *entrepreneur* can manage in their peculiarly wise way to get the best of adversity. I know the pride of the average Frenchman in his solvency, in his ability to provide for himself and his own. These qualities that have so long distinguished the French—these deep, solid, dynamic middle-class qualities—cannot be destroyed in a few years.

Of course, the recovery is not going to be instantaneous. The French population has been reduced by military losses, by executions, by diseases and epidemics; it has been weakened by imprisonment, suffering, malnutrition. But how many times in the past has France been bled white by war? How many times in the past has it been the battlefield of Europe? Always it has risen to regain its rightful

place among the free and civilized nations of the world. France will rise again. France can and will come back.

Question 2: What will be the economic and political direction of post-war France?

My answer is that the circumstances are overwhelmingly favorable for the rise from the post-war chaos of a resurgent capitalistic and democratic France.

Time to end confusion

CONFUSION is going to be the outstanding expression of the period immediately after the liberation of France. We have no ground here for optimistic delusions. For nearly five years the French have lived under the double dictatorship of Berlin and Vichy, cut off from all contacts with the outside world. The French system of free enterprise has been replaced by a forced totalitarian military economy. It will take a little time for France to return to normalcy, to awaken from the nightmare, to reestablish her contacts with the outside world.

The Quislings and the collaborationists will be cleaned out. The working class organizations will reappear,

so will the old political parties and the now hounded Communists.

New parties will appear; new trends, accompanied, undoubtedly, by attempts at a communistic dictatorship.

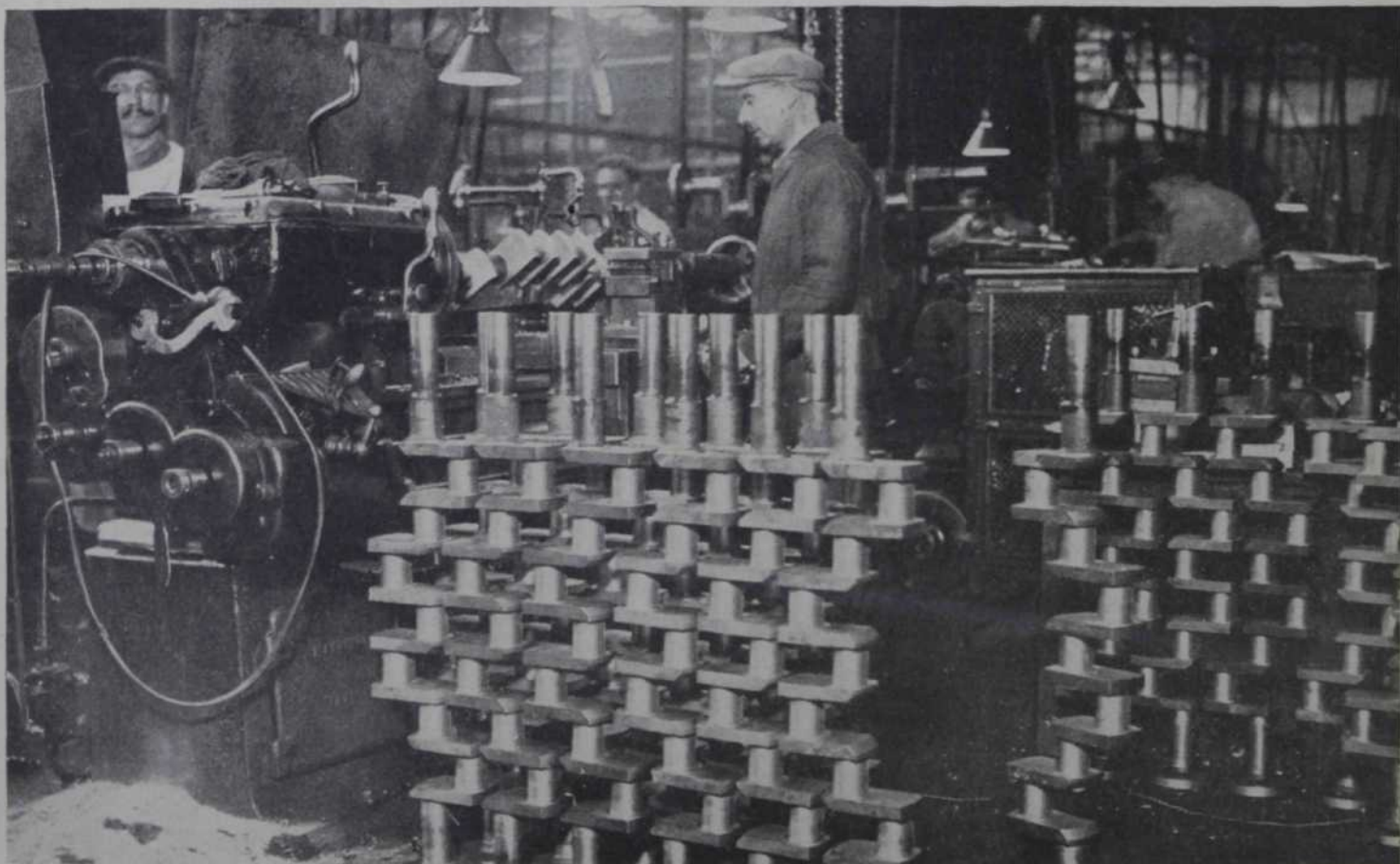
All this is bound to happen, and it should be regarded as a normal consequence of the situation we shall face.

But revolutions are not made at will. The final outcome of any revolutionary attempt, even so successful an attempt as the Bolshevik Revolution, is determined by the state of development of the people, and the balance of oppositions, and not by the will of the leaders.

Let us look at the French people. Take the peasant, one of the strong, stabilizing factors in French politics. In general we can say that the French peasant, like the peasant and farmer everywhere, is a man who believes in tangibles—land, property, stock, sound money, cash: things with an intrinsic value he can possess individually. He is and always has been cynical in regard to political abstractions.

In general, therefore, he is like the other European peasants. Nevertheless he is different, and it is this difference that will count. He is different because what he holds and what he

(Continued on page 65)



A thousand years of history underlie the will of France to regain her way of life, her trade, her importance in world affairs. Her people support adversity better than success



TO EMPLOYERS:

THIS MESSAGE may prove useful in helping your employees to avoid pneumonia . . . to recognize early pneumonia . . . and to appreciate the importance of prompt treatment.

Enlarged copies of this advertisement for posting on plant or office bulletin boards will be sent on request. Address: Metropolitan Life Insurance Company, 1 Madison Ave., New York 10, N. Y.



PNEU-MO-COC-CUS is a treacherous fellow (... and this is his best hunting season)

PNEUMOCOCCUS is the germ that causes most cases of pneumonia. He is a skillful hunter, preferring the cold winter months when people are less able to ward off his attacks.



Sometimes Pneumococcus strikes people who are in excellent physical condition. But he really goes to work with glee on someone whose resistance has been weakened — perhaps through overwork, poor nutrition, insufficient exercise.

He enjoys good hunting in stormy weather, stalking people who aren't dressed warmly, or whose clothing or shoes are soaked. Even better, he likes to shadow someone who has influenza, a severe cold, or a cold that hangs on. Such infections of the nose,

throat, or lungs help him start a full-blown case of pneumonia.

Once you learn these wily habits of Pneumococcus, you can take the obvious steps to avoid his attack.

If, in spite of precautions, he should press home a successful attack, *quick action is necessary!* Any of the following signs of early pneumonia are an urgent warning to call the doctor *immediately*: A chill, followed by fever . . . coughing accompanied by pain in the side . . . thick, rust-colored sputum . . . rapid breathing.



In most cases of pneumonia, the doctor has a powerful weapon in the sulfa drugs. In some cases, serum is still used effectively. The earlier treatment is started, the better are the

chances of hastening recovery and of preventing serious consequences.

Sometimes when pneumonia strikes, Pneumococcus is not to blame. The cause may be a germ or a virus against which sulfa drugs and serums are not effective. *In such cases, prompt medical and nursing care are particularly important, for recovery depends upon general care.*

During the "pneumonia months" the wisest course is to keep fit . . . avoid colds . . . take care of a cold should one develop. If a cold is very severe or hangs on, *go to bed . . . call the doctor!*

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A Senator hurries from committee to committee without catching up

Design for Law-Making

By CARLISLE BARGERON

AMONG the innovations that are predicted to make life better in the postwar world may be a streamlined Congress.

Ever since the elections of 1942 when aspiring candidates promised that, if elected, they would rejuvenate Congress, the body has been doing considerable soul searching. It was one thing for these aspirants to say that, once in Washington, they would see that the legislative body reasserted itself against the bureaucracy that had been built up. It was another thing to accomplish that transformation.

However, it begins to look as though, notwithstanding the traditions and customs of the past, something may be done. Several measures looking toward reorganization are now pending.

SUGGESTIONS for techniques and methods by which the country's legislative business might be improved are winning careful consideration

By Representative Dirksen of Illinois, there is a proposal to create a joint House and Senate committee to deal with the multiple problems relating to the war. It has been languishing in committee for about a year.

Representative Kefauver of Tennessee has proposed that Cabinet officials be required to appear periodically before Congress and explain what they are doing, pretty much as is done in England. This idea has bobbed up repeatedly for 20 years at least. In Hoover's Administration, the late

Senator Jim Couzens of Michigan advanced it.

He looked upon Congress, he said, as a board of directors of the biggest business in America. Therefore, he wanted to bring in the executives occasionally and talk to them as he had done when

he was a director of the Ford Company. The idea received considerable impetus recently when Secretary of State Cordell Hull appeared before a joint assembly of House and Senate to tell about his Moscow trip. Although he said nothing that he had not previously said publicly, his appearance gave the members something to write home about.

This idea ignores, of course, the fact that Cabinet officers appear frequently for questioning by congressional committees. These appearances, together with the Cabinet officers' in-

Who was it said, “Democracy is inefficient”?

EVERYBODY knows who — and it was one of the worst of his wrong guesses — as many things are proving.



One proof is the record of the American railroads.



In the year just ended, they handled a volume of traffic which dwarfs anything in the history of transportation.

And this job was done—not under the arrogant compulsion of dictatorship, but by voluntary cooperation in the finest American tradition.



There was first of all, the cooperation of railroad men and railroad companies with one another.



There was the surpassing cooperation of shippers and receivers of freight, who did their indispensable part in keeping freight cars on the move.

There was the helpful cooperation of govern-

ment agencies with railroad management.



And there was, on top of all this, the cooperation of the Army and Navy — the greatest shippers in the world.

Without all these, the record would never have been possible.

And finally, there was the friendly and patient cooperation of the traveling public — which accepted the inconveniences, and sometimes the hardships, of wartime travel, with typical American good humor and good sense.

So far have we come together along the road to victory. The road ahead calls for still more effort, still closer cooperation, in getting the utmost transportation service out of our railroad plant.

And when the victory is won—as surely it shall be—it will have been won by free men, working together under the rules free men established for themselves—the thing we are fighting to preserve.

BUY MORE WAR BONDS

AMERICAN  **RAILROADS**
ALL UNITED FOR VICTORY

stitutional press conferences, may be considered as counterparts of the British system of calling British officials before the House of Commons.

Another pending proposal is that by which Senator LaFollette of Wisconsin would reduce the number of the Senate's standing committees from 33 to 13. Each committee would have 12 members whereas they now have as many as 23. The Senator would set up eight substantive policy committees and five administrative ones, the latter dealing with appropriations, taxes, etc. Cynics say nothing will ever come of this suggestion because it involves the patronage of the committee chairmanships.

Too many committees

SENATOR LaFollette has pointed out that the members are on so many committees and sub-committees that they cannot possibly keep track of their activities. It is not unusual for a single Senator to arrive at a committee meeting with as many as five or six proxies from fellow Senators. At one time the Senator recalled, he could look at the calendar and tell which of his committees were dealing with important things. Now, the situation is hopeless and a Senator runs from one committee to another never getting a full grasp of what is happening in any one of them.

The Senator's talk gave Senator Maloney an idea. He agreed that reform was necessary. Thereupon he and Representative A. S. Monroney of Oklahoma introduced a resolution which is receiving much attention.

This resolution, introduced in both House and Senate, proposes that a committee from each body—made up equally of Democrats and Republicans—make a joint study of the whole congressional set-up.

Senator Maloney and Representative Monroney have gone about the matter in a broad and understanding way. They realize that, in spite of much superficial criticism, committee set-ups and the patronage involved have little to do with the problems which Congress faces today. Under the present set-up, the oldest members of House and Senate are the committee chairmen. A newcomer to Congress is asked his preference of committee assignments and, to the extent of the leaders' ability, he is given those assignments. He starts at the bot-

tom and works up as older members die or retire.

If the Democrats are in power, as they are now, the oldest Democrat in point of service is the chairman of the particular committee. According to the importance of the committee, he has the patronage of an additional secretary and a clerk, maybe two or three of each. He also has considerable influence as to what action his committee will take upon a particular bill. By the weight of his personality and position he may bottle up a bill he dislikes. But it is within the province of the committee, at any time, to out-vote him.

Manifestly, both houses have many committees whose studies of various subjects are often overlapping. As a result, government officials are frequently called to testify on the same subject before several committees.

The Maloney-Monroney resolution envisages that the study which it proposes may very well bring in this criticism of committee set-up and operations. It may also go into the question of seniority, by which some sections, through a practice of returning their Senators or Representatives time after time, come to have a preponderant influence. This is particularly true of the House where Southerners now almost dominate. It has the Speaker and some of the choicest key committee assignments.

But the Maloney-Monroney resolution goes beyond this. What it is primarily seeking is to give Congress

facilities for being better informed about what is going on.

The 78th Congress elected with a mandate, or so it understood, to assert itself, finds this most difficult. Congress, including members, clerical staff and assistants, constitutes a total of only some 1,500 persons. The total annual expense of Congress with its staff is around \$13,000,000. One bureau alone in the Executive Branch, the Indian Bureau, has a staff of 9,000 and its total expenditures are about \$27,000,000 annually. Congress with its limited personnel is trying to deal with a bureaucratic army of more than 3,000,000. The majority of these 3,000,000 are, of course, employees such as Navy Yard workers, postmasters and the like, but, even so, the multiple government bureaus have thousands of economists and experts who can appear before congressional committees to justify their demands, their acts, and their requests for money. Naturally they are adept at it.

More care in finance

TO ASSURE a more even distribution of experts on both sides of committee tables, at least at appropriations hearings, Representative Dingell, of Michigan, has proposed that the Appropriations Committees and the Finance Committees of the two houses coordinate their activities. At present they work entirely separately. Senator Tydings of Maryland has introduced a resolution which would require in peacetime that no money be appropriated for any project without a corresponding tax levy or a three-fifths vote of both bodies.

The appropriations committees, however, have taken the lead in the way of getting expert assistance. Several years ago, the House Ways and Means Committee and the Senate Finance Committee, dealing with taxes, undertook to set up their own independent joint expert staff. For several years this staff operated more or less as an adjunct of the Treasury. The present head of this joint staff, Colin F. Stamm, has convinced Senator George and Representative Doughton, respective chairmen, of the necessity of utter independence from the Treasury.

In the revenue legislation enacted last year, Mr. Stamm was authorized to get whatever information he wanted from the Treasury records. In spite of that, he was

(Continued on page 52)



"Look, Harriet—just like father used to make!"

ON

TARGET

Here are the bombs . . .

Kodak optical systems for fire control destroy the legend of "German supremacy" in lens making

For America's bombsights—which have shown our enemies the bitter meaning of "high-altitude precision bombing"—most of "the optics" are made by Kodak.

For our Army and Navy, Kodak also makes 29 of the most complex types of optical systems for fire control—the sighting of guns—including the famous height finder for anti-aircraft.

GERMANY has enjoyed a reputation for world leadership in lens making. But—as so often happens—reputation outlived performance.

Well before Pearl Harbor, Kodak optical research was developing lenses superior to any ever made by anybody, anywhere. A major advance has been the perfecting for new, finer cameras of a revolutionary new optical glass which

gave lenses greater speed—definition . . . or could more than double the "field of view" of a fire control periscope.

This glass was immediately incorporated in instruments for fire control . . .

Effective fire power—hits, not "tries"—is the result of sighting through a series of lenses . . . an optical system . . . which locates, magnifies, and "ranges on" the target.

Army Ordnance experts now report: "We have examined captured German sights and periscopes and, element for element, we are turning out better material."

The effectiveness of American fire power is making history . . . Eastman Kodak Company, Rochester, N. Y.

REMEMBER CORREGIDOR? . . . and the last words over their radio—"Just made broadcast to arrange for surrender . . . everyone is bawling like a baby . . . I know how a mouse feels. Caught in a trap waiting for guys to come along to finish it up." Corregidor is a stern example to us at home. **BUY MORE WAR BONDS.**

Serving human progress through photography

Here is an enemy cruiser "safe" behind her torpedo net . . .

Official Photographs, U. S. Army Air Forces

"On Target" . . .

Drifting bubbles . . . but no cruiser

"You Can't Do It That Way!"

By HERBERT COREY



LINDSAY CARTER WARREN, Comptroller General of the United States, is the umpire of government finance—and he always calls them as he sees them

THE LONELIEST official in Washington is Lindsay Carter Warren, Comptroller General of the United States. He is friendly by instinct and practice. He does not beat the desk or shout. He would prefer to be accommodating.

But he spends his life saying No!

There are 10,000 men and women in the General Accounting Office. They are engaged in auditing the accounts of most of the government departments, divisions and bureaus. As impersonal as cash registers, they read the figures according to The Law.

Not, please observe, according to the regulations drawn up by the departments, or the demonstrable equity of each transaction, or the kind blue eyes of the protestant. Just according to The Law. If either party thinks the law is unfair he may appeal to Congress to change it. It is Mr. Warren's belief, after spending his whole life in some form of public service, and about 17 years in Congress, that Congress is always disposed to be fair. Before it can be fair

it must understand each situation. This often takes time and energy and, in the meantime, The Law stands and Mr. Warren says No.

That is what makes him lonely.

Bureaucrats beat on his desk and say they will not appeal to Congress. They will do it some other way. Friends come to him. Friendship is out. Business men come to him. They say they are the victims of gross governmental injustice. Mr. Warren observes that he has nothing to do with equities. He only deals with The Law. Heads of government departments speak to him. They say that he is at-

tempting to interfere with their authority in their departments. Mr. Warren points to The Law.

He is, in fact, sympathetic with many of these protestants. He believes that the vast majority of American business men are not only honest in their dealings with their Government but generous as well. Now and then a wrong'un appears. For the most part those who protest—as in the renegotiation contracts, for example—are innocent victims of that storm of haste which swept the country when it was forced to get ready overnight to fight an unwanted war. Every one knows that story. He would help these honest men if he could. But if he were to step outside the law to do so he would be substituting his judgment for the law and the courts.

The office of Comptroller General of the United States was created by Congress in 1921 for the purpose of checking such substitutions. Congress gave the Comptroller General a 15 year, \$15,000 term, freed him from interference by the Executive, and

provided that he should not be removable except for cause and should not be eligible for reappointment. That makes him the most nearly free man in the entire government.

Mr. Warren is a friendly, brown-suited, eye-glassed man of 54. He wears his stiff brown hair, slightly grizzled, in a sort of cockatoo crest. His nose is a bit on the beaky order. He likes to go fishing. He owns no special rods, reels, fishing pants or lures. If a friend were to say to him:

"The rock bass are running off Solomon's—"

The Comptroller General would close his desk and go, if not detained by urgent business. He would go as is, soft hat, varnished shoes, pressed brown clothes. Some one would provide him with fishing rig and boat. If the friend were in error about the rock bass, nothing would be thought of it. Mr. Warren is used to the vagaries of fish. The walls in his office in the old Pension Building—the one with the frieze of Civil War soldiers running around the outside—are covered with autographed photographs of men registering importance. The picture he likes best shows a boat loaded with huge channel bass and five more or less disreputable men grinning over it. The boat load was a record catch:

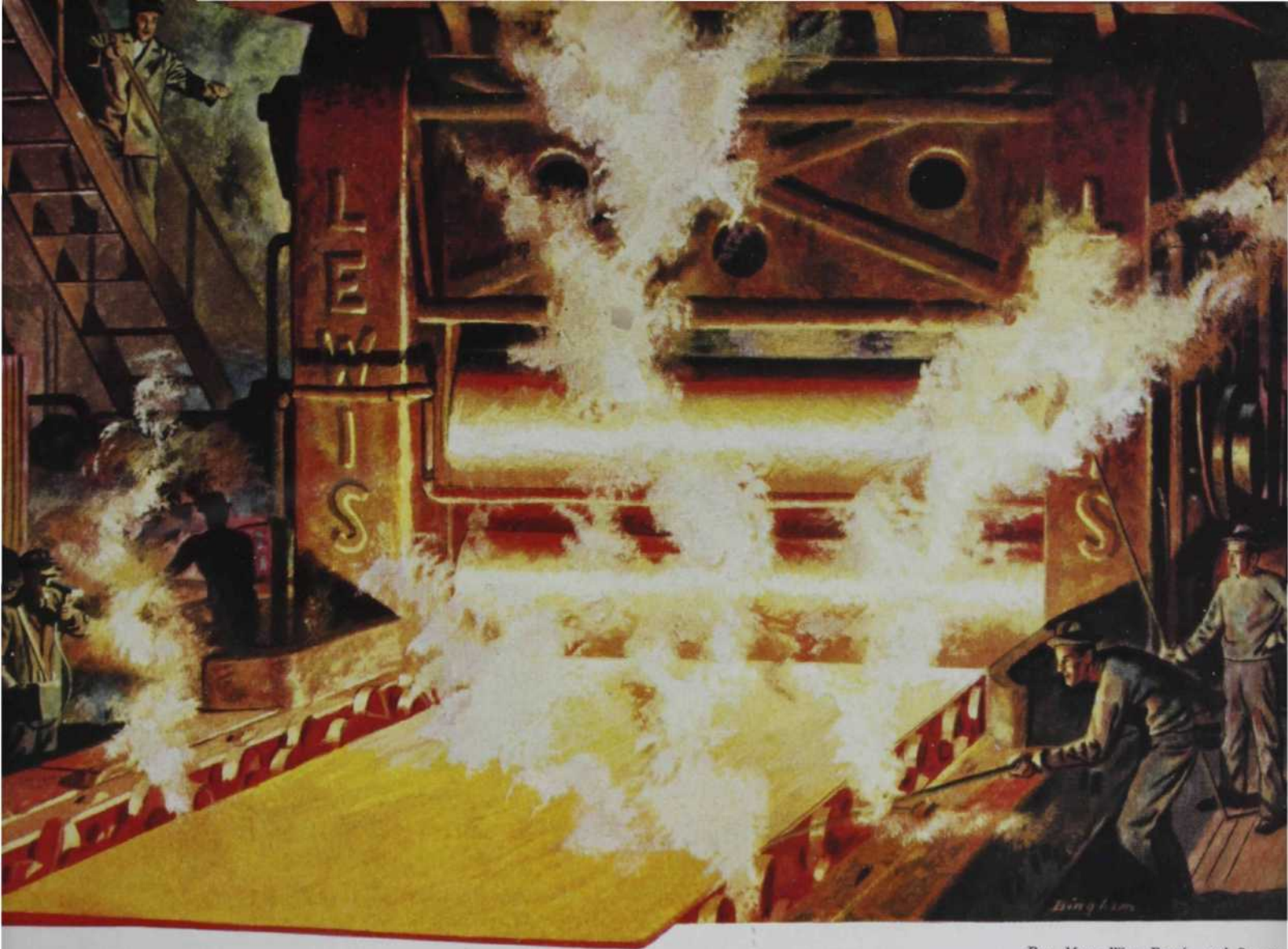
"At least for four or five years."

He might have made a good story of it but he didn't. He is a withholding kind of person.

No adventures in fishing

HIS personal assistant is Dudley W. Bagley, for three years state director of the REA in North Carolina and Mr. Warren's close associate for 20 years. Mr. Bagley does not recall that Warren ever reported any adventures. If he ever had any he said nothing about them. By the law of probabilities he must have fallen out of a boat at some time because the waters of Chesapeake Bay and Oregon Inlet are fickle. If he ever did he just crawled back in and went on fishing. Perhaps he catches more than fish on these

(Continued on page 74)



Buy More War Bonds and Stamps

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As a producer of rolling mill machinery, rolls, castings and other basically important equipment for the steel, as well as for the brass, copper, aluminum, zinc, lead and other non-ferrous industries, Blaw-Knox has long been pre-eminent. This is also true in the field of fabricated products for railroads, public utilities, contractors, the electronic industry and industry in general.

Equally significant is the position which Blaw-Knox has attained in the process and chemical fields. In these it provides a service that includes—under one responsi-

bility—complete plants designed, engineered and carried through to operation, as well as all types of process equipment.

The experience of long years, plus a great manufacturing organization comprising seven factories, hundreds of engineers and well-staffed laboratories, are at your service. We would like to discuss Blaw-Knox products and services with you, as a help in your postwar planning. If you need manufacturing cooperation and the benefit of our engineering and marketing experience, let us talk it over.

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COMPANY

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AMERICAN INITIATIVE
AND INGENUITY

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POWER PIPING DIVISION, Prefabricated Piping Systems

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COLUMBUS DIVISION, Ordnance Material

UNION STEEL CASTINGS DIVISION,
Steel and Alloy Castings

MARTINS FERRY DIVISION,
Bofors Anti-Aircraft Guns

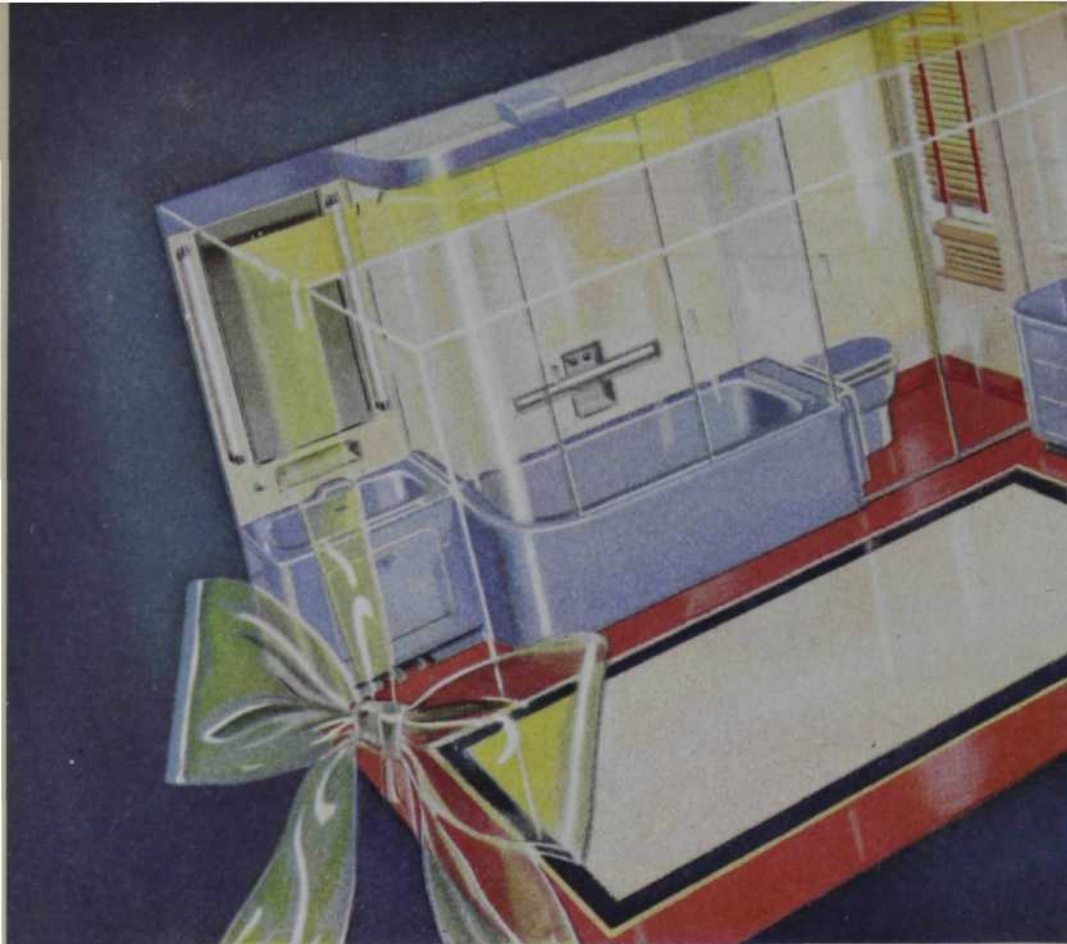
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A FEW VICTORY PRODUCTS



Bofors Quad anti-aircraft
gun. One of many Blaw-
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Plastics Will Mean Better Homes

...and more of them!

EVEN TODAY, plastics men can vision a bathroom with practically everything in it made of plastics or containing plastics in some form. Imagine such a bathroom, costing less to manufacture, to ship, and to install, delivered *as a unit* to your home!

The raw materials to make better homes with more bathrooms and finer kitchens come true *are in existence today* . . . in VINYLITE and BAKELITE resins, and plastics made from them.

BAKELITE resin-bonded plywood, like that from which planes and torpedo boats are made, can be used to make floors, walls, ceilings, and furniture.

The type of plastic film used in water-proof, chemical-resistant food bags and rifle covers can be fabricated into mildew-proof shower curtains. VINYLITE resins can also be made into rot-resistant floor coverings that can be walked on millions of times *without showing appreciable wear!*

Our engineers know from the record of VINYLITE plastic-coated life raft sails, sleeping bags, and life preservers, that

VINYLITE plastics and compounds can be used in the future to bring you wall coverings, window curtains, and furniture finishes that will outlast anything now available.

Under heat and pressure, VINYLITE and BAKELITE plastics can be molded into numberless useful forms. Experience gained in molding war equipment will help to bring you such things as molded plastic furniture which will be lighter, easier to move, easier to keep clean!

Spun plastics made from vinyl resins are resistant to rot. Right now, such plastics are used for making jungle hammock ropes and vital chemical filters. They also can be fashioned into draperies, upholstery, stockings, and other articles of clothing . . . sun-proof, water-proof, and moth-proof!

VINYLITE and BAKELITE resins and plastics, and many new techniques for using them, are peacetime research achievements of CARBIDE AND CARBON CHEMICALS CORPORATION and BAKELITE CORPORATION, both Units of UCC. Fabricators converting these raw materials into finished articles are making them mean more and more to you.



GREATER SAFETY! Improved electrical wiring insulation that *will not support flame* can be made from several VINYLITE plastic compounds. Such wiring, now employed in vital circuits of warships, will some day provide greater safety in the home.



MORE BEAUTY! New washable water paints based on BAKELITE resins, will bring new beauty to homes. These paints are inexpensive . . . and *easy to apply!*




LESS EXPENSE! Use of BAKELITE molding plastics in making washing machines, refrigerators, and many other household devices and fixtures can mean lower-priced, longer-lasting equipment for you.



LESS WORK! Easier cleaning of plastic-treated walls, ceilings, and floors. Plastic furniture and upholstery that are easier to keep clean. Yours in the future!

BUY UNITED STATES WAR BONDS AND STAMPS

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Capital Scenes... and What's Behind Them



Philosophy in politics

THE OLDTIMER said that when he was a careless youth he practically supported the game of Spanish monte. The feature of this entertainment is that once in each deal the player gets an even break:

"When 'alcy' is dealt the players have a 50 per cent chance. Only they must stick together and all play the same card."

He thinks Congress is getting its chips down on the "alcy" in its conflict with the executive. Congress is not unanimous, and if Congress ever were unanimous he'd figure another cornerstone of the republic had been kicked out. But it is as nearly unanimous as desirable in its wish to find out what is going on. Fifteen or 16 special committees of investigation are at work all the time, and something like 215 inquiries have been made by the standing committees. These are non-partisan, too, because both parties have been playing fair.

Blackout curtains are up

RETURNING correspondents have been bringing in queer stories. The military end of the war is getting along ok—slipping now and then but doing pretty well on balance—but the people are not being told what's what in world politics.

"We know we are fighting for our lives," he said. "The Allies are loyal to each other."

"But what are the bugs under the chips? When the cutting-up begins, are we going to spend our money and the lives of our boys to keep the Dutch throne polished, or put the Danish and Norwegian kings back in their palaces, or fix it so George, more or less of Greece, and Alexander, to a certain extent king of Jugo-Slavia, will be able to settle down to lives of ease? And how about affairs in the East? Suppose the folks over there had rather own one independent breech-clout than dress up in royal raiment? I've been told the sentiment for the British is practically ice-cold. Is it our business to fight to restore a *status quo* that mighty few of us liked before the war?"

We have no option now

THE CONGRESSMAN said he had been talking with his fellows on The Hill and that it was their fairly average

opinion that we—the people and Congress—should be told what is going on while it goes. Otherwise we are playing Blind Man's Bluff, he said, and hurting our shins on strange chairs.

"I'll make you a little bet," he said, "that just as soon as this war is won our people are going to rise up and demand that our armies come home, and that we stop playing in the dirty pool of European politics, and that we will decline to pay taxes to send machinery and new plumbing to folks who have always farmed with hoes and that we will quit going with a little less food than we want to give food to other people. And I don't care how handsome and sweet are the policies of the UNRRA. I'm telling you we won't do it."

He is not defending this attitude. He merely states that it will come. He has been talking to the other congressmen.

These are non-partisan affairs

THERE is a chance that both the Kefauver and the Monroney-Maloney resolutions will be adopted. Ultimately, that is. Not right now. The Kefauver resolution provides that Cabinet members may be called before the House for questioning. That was first proposed in 1864.

"The objection is that the minority party might twist a little advantage out of it. Ickes might be called to answer questions about coal, or Wickard about food and, if they refused to talk or dodged or used the Sunday set of figures, then the Administration would be injured. But no Cabinet member would be fool enough to do anything of that kind."

There have been differences—

HE thinks the Kefauver resolution, if and when adopted, will be accepted by a completely non-partisan vote. Not every congressman likes the idea and still others are thinking it out slowly. But the differences are not political.

"Same way with the Monroney-Maloney resolution to set up a working staff to provide Congress with facts on all important propositions."

Some way must be found to brief information for Congress, he said. He is a Democrat and most of the time he has voted the New Deal way. Some part of the time, he said, he was right, and some other part of the time he was merely not informed. He believes that the combination of the Kefauver and the Monroney-Maloney resolutions will go far

toward adding to congressional competence.

"Of course most of us will vote 'regular' much of the time."

Realism growing on the hill

A SWARM of radio commentators, he observed rather bitterly, have been accusing Congress of impeding the progress of the war by

carrying on inquiries which might save billions to the taxpayer—

"And Lord knows he'll need 'em."



The fact is Congress has given without stint. It has nothing to do with the conduct of the war.

"If we didn't dast ask how the money's being spent we might as well close our desks and go home. We'd stay there, too, forever and forever."

How about some stockpiles?

SOME of the more farseeing members of Congress are trying to work out a plan by which we will be paid for the things industry will sell Europe after the war is won. IOU's are not in favor. They have been tried. European industry will hardly be able to send us things for a year or so. The position of gold in world trade is not yet fixed. An International Bank is only a possibility. Maybe we can take our pay in stockpiles?

Two currents in Congress

THERE are always two currents running in the same channel in Congress. One is the relation of Congress to the Executive:

"Uncle Joe Cannon's Republican Congress did not get along with Republican President Taft. Charley Michaelson's Democratic Congress quarreled with Republican President Hoover."

The other current is that of partisan politics. If the dominant party yields too far to the Executive there is always a swing. Look at the record. First Congress and then the Executive is on top, no matter what the political complexion may be.

The congressman quoted has been on The Hill so many years that if the sum were stated he could be identified at once.

Congress is a career

"DON'T forget that every congressman—bar one now and then—hopes to stay in Congress. To do so he must study the folks back home."

He recalled a story told by Clarence C. Dill, once Senator from the Apple, Wheat and Metals state of Washington. Dill came to the Senate with high ambitions and took Henry Cabot Lodge as his model. On one occasion Lodge voted for a bill which revolted the neophyte:

"Senator," he remonstrated, "I have looked up to you as a statesman."

Mr. Lodge grinned at him.





SPEED —in the '60's

EARLY in 1860 the famous Pony Express was the quickest and most dependable means of communication over long distances in the Far West, even though service was often interrupted by hostile Indians or heavy storms. Today, of course, radio is the most efficient means of long-distance communication, but even radio must meet problems of interference by natural or man-made static. Breeze Radio Ignition Shielding answers these problems by providing assemblies in all shapes and sizes to meet any shielding need. Dependable reception and transmission of messages, so essential to wartime operation of America's fighting units of land, sea, and air, is insured by this product of Breeze research and development. In quantity production, Breeze Shielding plays an important part in our fight for Victory.



Breeze

CORPORATIONS, INC., NEWARK, N. J.

"Just remember Clarence," he said, "if you're not a politician you won't stay here long enough to become a statesman."

Policy pays off in the end

THE Lodge policy pays off, he said. Before this country began to take a realistic view of the war, most congressmen would have evaded a really searching inquiry into lend-lease expenditures and counter-payment. Then the folks back home began to doubt if reckless waste is an aid to the war effort.

The Senate Committee on Appropriations thereupon employed a staff to get the facts. There will be an inquiry into the charge that a British-Argentine company has a monopoly of the Argentine's production of quebracho, which is necessary to the tanning of leather. The folks do not fear that the proper protection of our own interests is disloyalty to an ally.

Democratic Chairman Doughton of the House committee which has been building the tax bill had no hesitation in showing that the *per capita* indebtedness of the United States may be larger today than that of Great Britain, or in comparing the expenditures of the two nations. Any congressman who attempted to keep his people in ignorance would risk his neck.

"This is not politics. Just common sense. The one big issue on The Hill today, unless I miss my guess, is getting at the truth."

Rattling of old bones

HE quoted an old reporter who once worked for the *New York World*. The reporter said this town is filled with suppressed stories.

"Of course the reporters know them. But by this and that they're not telling them. The reporters had the lowdown on Boss Tweed, too, but do you know what started the explosion that blasted Tweed? One little measly clerk got mad because he thought he had been given the hot end of the poker and before the thing was over Tweed was in jail. Just that one little outraged white collar guy."

"And the Lexow inquiry that stood New York on its ears. The reporters knew all the facts. They had known them so long that they seemed commonplace. But one angry wife told the tale to Dr. Parkhurst and the lid was off. It only takes one hand to set off the political chemicals."

REA may be a sample

AN inquiry into the operations of REA is already finding things.

"You will not find five members of Congress who will say that government should take over American business, if the question is squarely put."

But Senator Byrd has been informed that, in his own state of Virginia, a

local manager of the REA opposed a proposition to create a company with private capital to set up a community cold storage plant.

"Why should you put your money into this?" he asked the prospective investors. "The Government will provide the money. I've had assurances from Washington."

"Wash-day is a-coming"

SO much has been going on that he would offer a small bet that not one man in the country can see it as a whole.

"I'm holding out Barney Baruch on that. Maybe he does."

There has not only been a three-ring circus but the average citizen has been watching it from the revolving trapeze. The old Congressman wanted it understood that he is not criticizing the military departments. They may have overshot now and then, and made mistakes, but it was their duty to overshoot. They had to prepare against any emergency. Industry has been doing a swell job, even if some rat did get into the pantry occasionally. Most of the contracts which must be renegotiated were honest but were loosely drawn because neither party could foresee what was coming and both were under the terrible pressure of haste. But he anticipates a period of pitiless inquiry when the war has finally been won.

Pre-view of the war

MIRACLES might happen. The German people, unarmed, unorganized, ruthlessly policed, might sweep Hitler out of office. The Allied Powers might turn soft and take the Nazis back into full communion. The conquered peoples of Europe might embark on a crusade. The American Navy might sink every Nippon ship in one smashing victory. The Japanese soldiers might turn against the Son of Heaven.

"Otherwise the German war will not end before late in the fall of 1944. In the meantime we will suffer frightful losses. The Japanese might be able to hold on for another year. Mountbatten will not be able to launch his attack to save China before the dry season of 1944."

That appears to be a fair presentation of military opinion. It will be urged that a fighting man is a pessimist by nature. That is not wholly true. He must be a realist if he is to win. These things are unpleasant to write and to read. But they are unsafe to dodge.



Herbert Cove



The machine that discovered 100 people

NEEED help? So did this Chicago manufacturer. He put in Addressograph *simplified business methods*—with revolutionary results! He found he could transfer 100 men and women to more vital jobs in office and shop—jobs they liked better and where they were worth more.

He found—as thousands of others are finding—that Addressograph can bring to paperwork the same savings of time and money, the same increase in efficiency, as mass production brought to factories. It is a new science, with unlimited opportunities of savings for every American business.

Addressograph machines write payrolls and dividends, personnel records and job tickets, tool crib records and shipping lists—in fact anything that requires accuracy, speed and low cost in repeated writing.

Addressograph (with Multigraph, made by the same company) can save you time and money in 80% of the paperwork you do. You have the machines; let us show you how they can make more money for you now and for all the years to come. Write or call Addressograph-Multigraph Corporation—Cleveland and all principal cities of the world.

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SIMPLIFIED BUSINESS METHODS

Plastic Rubber's Growing Pains

By A. H. SYPHER

THE HEADACHES of making synthetic rubber have been cured, the processing problems are just beginning. Now the big question is: Will we have more rubber than we need when the war ends?



One problem is in teaching rubber workers to handle a new substance . . .



For the first time in the entire history of the rubber industry women are being employed in the actual building of tires . . .



Fewer tires are being made today, but those for military use require more equipment, more labor

THREE DAYS after Pearl Harbor, the federal Government stopped the sale of tires to civilians, and rubber workers began leaving Akron, Ohio, in droves, headed for the glamour industries—the aircraft factories, shipyards, munitions plants—places where a man could make a living in wartime.

After all, they reasoned, we were getting no rubber. No rubber meant no tires, and no tires meant no jobs. Akron, rubber manufacturing center of the world, was headed for depression. That, they thought, was clear.

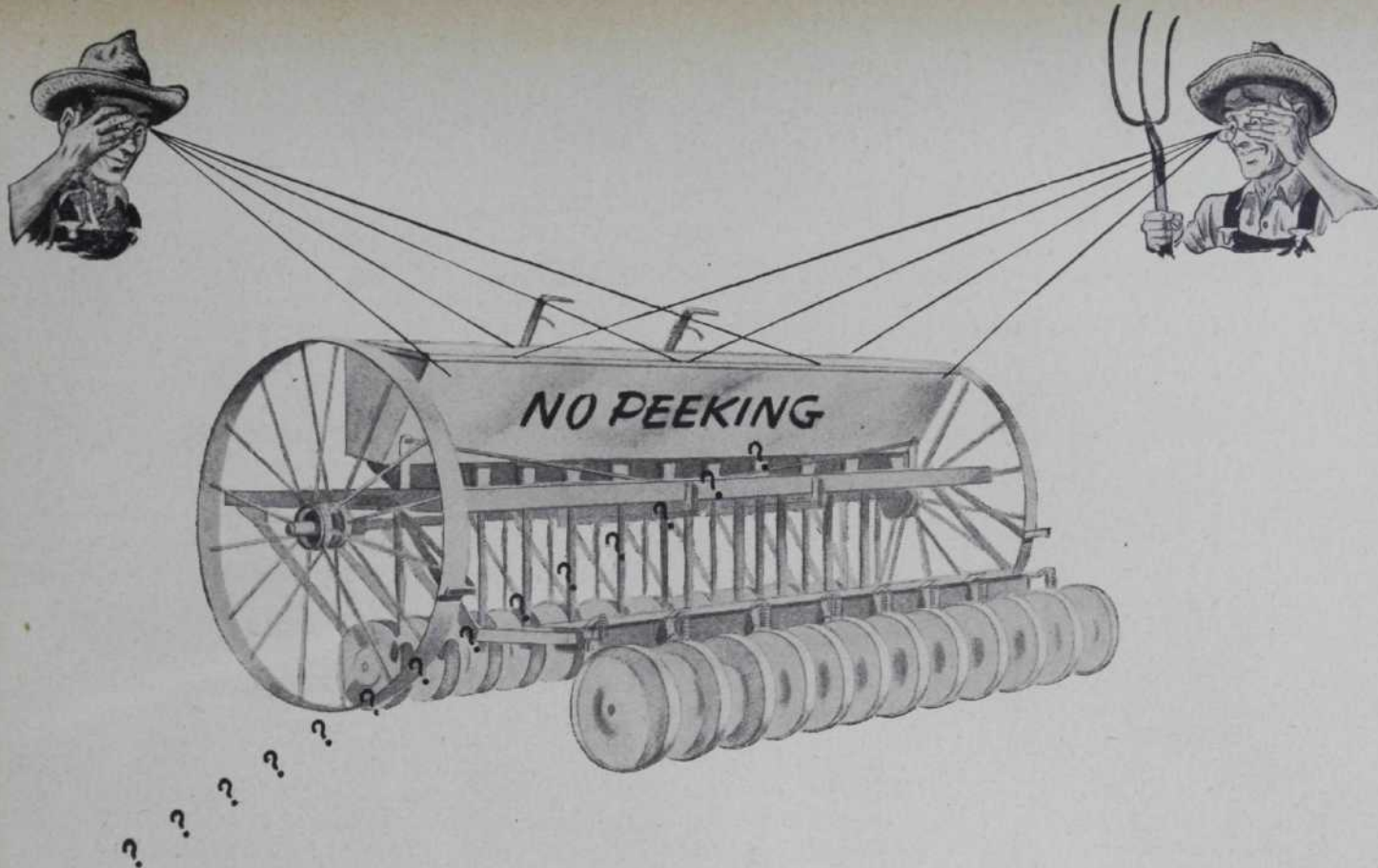
They were doubly wrong!

The rubber companies set out at once to find war work for their facilities, their production know-how, their skilled labor. They brought the glamour industries home.

Today cannon-carrying Navy fighter planes roll steadily from the assembly lines in new plants built at the edge of Akron's bowl-shaped airport and thunder off to battle stations. Thirty thousand men and women keep the lines

moving. More thousands turn out anti-aircraft gun mounts, machine gun clips, dozens of other direct war products. Akron's new war factories, aside from rubber, provide work for more people than the rubber plants employed in 1939.

Meanwhile, rubber bounced into a boom all its own.



WHAT'S SO SECRET ABOUT A FARM MACHINE?

Perhaps you're interested in farm machinery. Perhaps not. But the simple idea of designing a machine, or product, with more practical "see through" utility is one that should appeal to you.

We use farm machinery as an example. Why not make the hoppers of grain drills, seeders, planters or lister planters so the farmer could watch what is going on inside . . . watch the level of the seed . . . know that it is feeding properly . . . know exactly when refilling is required?

Or take the many working parts of a combine, or a corn sheller. Or a cream separator? How much more convenient if the user could always see that these parts are operating properly?

It's a simple idea, with a simple answer: make better use of a transparent material. Glass, of course. Not the glass of years ago. But modern L-O-F glass.

Glass is one of the few materials you *can* see through. (It's tops in that) But there's a lot more to this material. Dimensionally, glass is one of the most stable materials. Its surfaces are among the hardest and smoothest known. Nonporous. Acid-resisting. Unusually resistant to abrasion.

And modern L-O-F glass is strong. The way we temper glass a square foot, quarter-inch thick will withstand a pressure of 60 pounds per square inch and has a modulus of rupture of 30,000 pounds per square inch. We can laminate it with other materials. Give it to you with a metal collar. Or in multiple units that insulate. Or in special types that repel the sun's heat or ultraviolet rays. The final product may be had in flat sheets or bent shapes.

So just remember when you design any product for the home, for industry, or for any structure, there is a material that's strong and long lasting . . . and transparent. It's glass!

Perhaps glass fits your product or plant. Won't you write us about any use that interests you? That's the way to really find out. Libbey-Owens-Ford Glass Company, 1414 Nicholas Building, Toledo 3, Ohio.

Destructible?

Wood-Metal-Plastics-Glass. No material is indestructible. However, barring unseen conditions, no material will fail on a job in which it has been properly specified and engineered. When our application engineers say "Yes", you can be sure about glass.



LIBBEY • OWENS • FORD

A GREAT NAME IN *Glass*

Hidden behind record-breaking highs in aircraft production were record-breaking highs in the production of aircraft tires, self-sealing gasoline tanks, and scores of other rubber products that go into warplanes.

Rapid expansion of mechanized forces brought rush orders for combat vehicle tires. As war progressed, the list of essentials made from rubber grew longer, sent new orders into the industry.

Less rubber but more labor is used

TOTAL tonnage of rubber processed by manufacturers last year equalled only 65 per cent of a normal prewar year's use, but it went into such things as bomber tires that require 30 times as much labor as passenger car tires, and it included synthetics that require more milling and mixing, more careful handling, and therefore more equipment and more labor.

The industry was nearing the top of its capacity in Los Angeles and in other centers as well as in Akron.

Add to this load Rubber Director Bradley Dewey's estimate that truck, bus and military requirements will be 80 per cent greater in 1944, and you have an answer to the question: Will civilians get tires this year?

They will not, according to executives in the industry. Not even all those essential civilian users whose needs Mr. Dewey estimates at 30,000,000 tires.

They might get 17,000,000, perhaps as many as 24,000,000, but not 30,000,000, these executives say.

Although America's battle of rubber has been won through the \$755,000,000 synthetic program, the battle of rubber fabrication is just getting under way.

Most critical problem in this second-phase battle is manufacturing capacity. Demands have been multiplied, but war limits expansion.

A coordinated, industry-wide program under which \$72,000,000 in private capital is being spent to expand capacity by adding equipment in existing plants is in progress. Its full effect on production will not be felt until June.

War work brought into rubber factories early in the

war is being shifted elsewhere to make room for rubber production and cutbacks in the ordnance programs are welcomed because of the manufacturing space they free.

Next comes manpower. The War Manpower Commission lists both Akron and Los Angeles, principal tire making centers, as serious shortage areas.

One tire company has lost nearly 16,000 employees to the armed services. Others have proportionate losses.

For the first time in the industry's history, women are building tires. They hold many other jobs traditionally held by men, permitting the transfer of men to the heavier, hotter jobs in rubber fabrication.

Nearly every train arriving in Akron from the South brings new candidates for factory jobs, men and women who are following a route laid out years ago when the rubber companies encouraged the South's poor to seek a better living in the expanding rubber trade.

Executives consider the manpower problem serious, but expect to meet it without production delays.

Third and least worrisome of the industry's problems is that of educating rubber workers in handling a new substance that is not rubber, and actually is not synthetic rubber, although it commonly is called that.

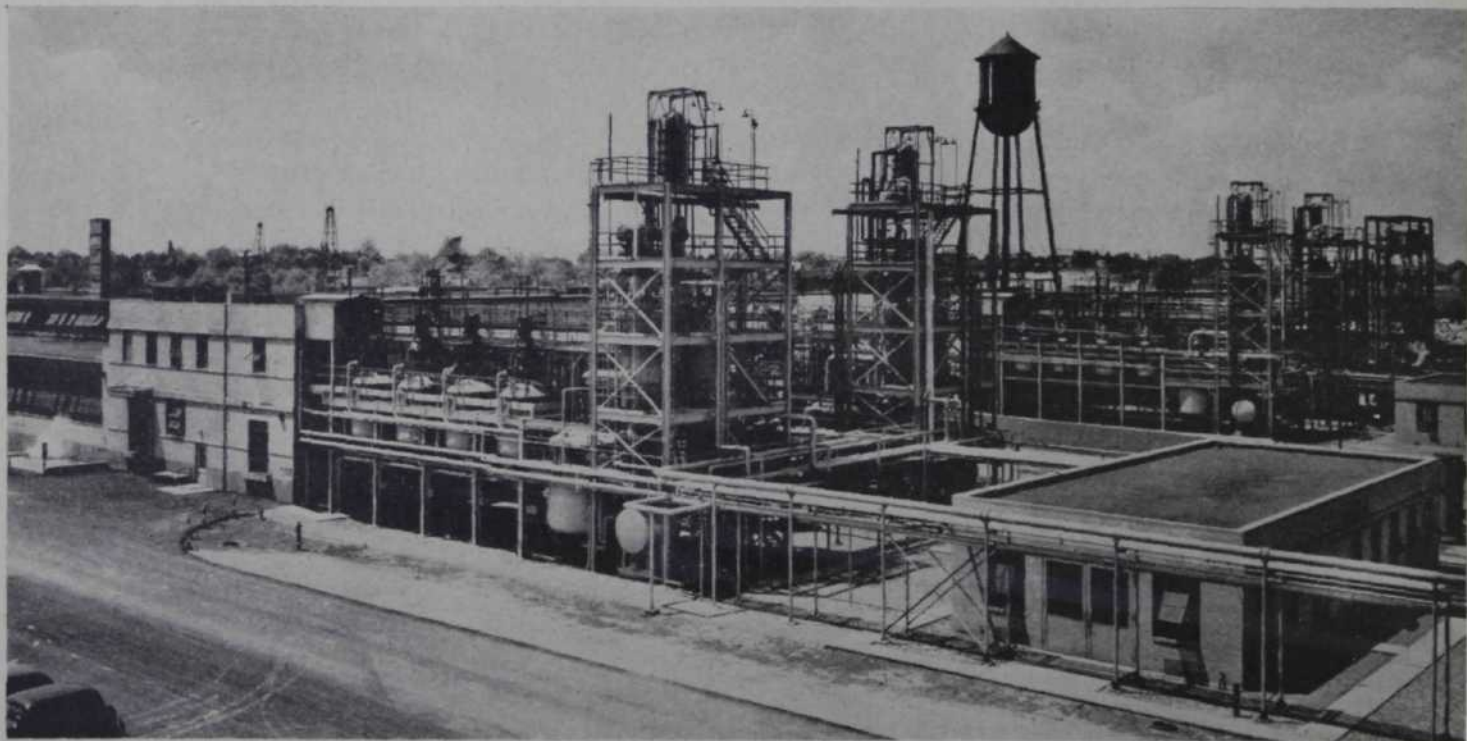
Not a true synthetic rubber

A TRUE synthetic rubber, chemists contend, would have the structure and characteristics of natural rubber. GRS, (Government Rubber Styrene) principal product of the government synthetic program, has neither. Technically, GRS is a plastic substitute for rubber, rather than a synthetic.

The difference increases the problems of fabrication. GRS lacks rubber's natural characteristic of complete cohesion, for example.

During the past 35 years tire manufacturers have been able to increase the service in their product from some 3,000 miles to more than 30,000. One of the principal causes of the improvement has been the development of rubber compounds, highly specialized for particular jobs.

As many as 15 different natural rubber compounds go



This plant is equal in capacity to 200,000 acres of rubber trees. Automatic machinery enables one man to produce as much as 100 could produce in the Far East



CHOW TIME ON A *Submarine*



Norden Bombsights

Years of experience in precision manufacturing are enabling Burroughs to produce and deliver the famous Norden bombsight—one of the most precise instruments used in modern warfare. New figuring and accounting machines are also being produced by Burroughs for the Army, Navy, U. S. Government and other enterprises whose needs are approved by the War Production Board.

★ BUY MORE WAR BONDS ★

Wherever men are in action—in submarine or foxhole, in the Mediterranean or the Pacific—they must eat.

A vast, complex mechanism of supply, transport and distribution is required to provide tons of meat, vegetables, dairy products and other foods for our armed forces all over the globe.

The purchase, handling and distribution of all this food are sciences entailing a tremendous amount of paper work—stock records, inventories, budgets and other records familiar to quartermasters.

From the war's beginning Burroughs has been privileged to provide a great many of the figuring and statistical machines which handle the figure work so vital to this scientific planning.

BURROUGHS ADDING MACHINE COMPANY • DETROIT

Burroughs

FIGURING, ACCOUNTING AND STATISTICAL MACHINES • NATIONWIDE MAINTENANCE SERVICE • BUSINESS MACHINE SUPPLIES

NATION'S BUSINESS for January, 1944

Far sighted manufacturers are
selecting their post war
Pacific Coast factory sites now



A VALLEY BUILT ON A VAST RESERVOIR OF *Water*

Is water important to your manufacturing process? If so, Santa Clara County is ready-made for your Pacific Coast plant. Besides vast storage lakes and countless miles of watershed lands, the entire Santa Clara Valley is built upon a vast reservoir of water. Plants can tap their own water supply—or use existing facilities—at very nominal rates.

EVERY ADVANTAGE FOR INDUSTRY

Water is but one of Santa Clara County's natural advantages for industry. There is unlimited power... central location... ideal climate... available labor supply... good transportation facilities... low taxes and plenty of close-in land.

Write today for "Post War Pacific Coast", a factual book presenting the many advantages of Santa Clara County.



DEPT. N

**SAN JOSE CHAMBER OF
COMMERCE**
SAN JOSE, CALIF.

SANTA CLARA COUNTY *California*



The population
center of the
Pacific Coast

into a passenger car tire—one for tread, another for outer sidewalls, still another for the fabric layers, and so on. Under heat and pressure these various compounds flow into each other in cohesion so complete that they cannot be separated.

Lacking this characteristic, synthetics must be cemented together. Cements and methods which eliminate separation have been developed, but the added step in manufacture remains.

Workers learn new tricks

ANOTHER factor is that rubber workers, after years spent at their trade, must become accustomed to a new material.

Production men attach less importance to this because the changeover is gradual. Last May the industry used 90 per cent natural rubber, ten per cent synthetic.

By October the output of newly opened GRS plants changed the proportion to 50-50. Now, as stockpiles of natural rubber run low and the flow from GRS plants increases, the proportion is shifting gradually to 90 per cent synthetic, ten per cent natural.

The last ten per cent will be blended with synthetics to make them more nearly approximate the properties of natural rubber for highly restricted uses that all-synthetic compounds will not meet. Otherwise, the nation's rubber products will be made of synthetics.

This will have little effect on passenger car drivers who are able to get new tires. Progress in the manufacture of all-synthetic passenger car tires during the past 18 months nearly equals the industry's progress over a 35-year period of natural rubber development.

Synthetic tires produced today are as good in nearly every respect, and better in at least one, than the natural rubber tires they replace. The average driver could find no difference between the two, in appearance, use, or length of service.

Tests show that synthetic rubber treads have greater skid resistance than natural rubber, and this point

alone indicates postwar use of synthetics in tread compounds.

The main obstacle yet to be overcome in the manufacture of synthetic rubber tires is dissipation of the heat which the continuous flexing caused by steady highway speeds and heavy loads, develops in the tire. Heat is the principal cause of tire failure.

Because passenger car tires are thinner and less heavily loaded, the heat problem is not serious. But it is serious in the large truck and bus sizes which are thicker and subject to heavy loadings and hard use.

Until this heat dissipation problem is solved—and engineers see no immediate solution—the larger size synthetics will give satisfactory service only with careful use and restricted speeds.

It has been said that world politics will determine the postwar future of the synthetic rubber production system in which the American people have invested an amount nearly equal to the entire investment in the rubber manufacturing industry. But strong economic forces, as well as political considerations, will affect synthetics' future.

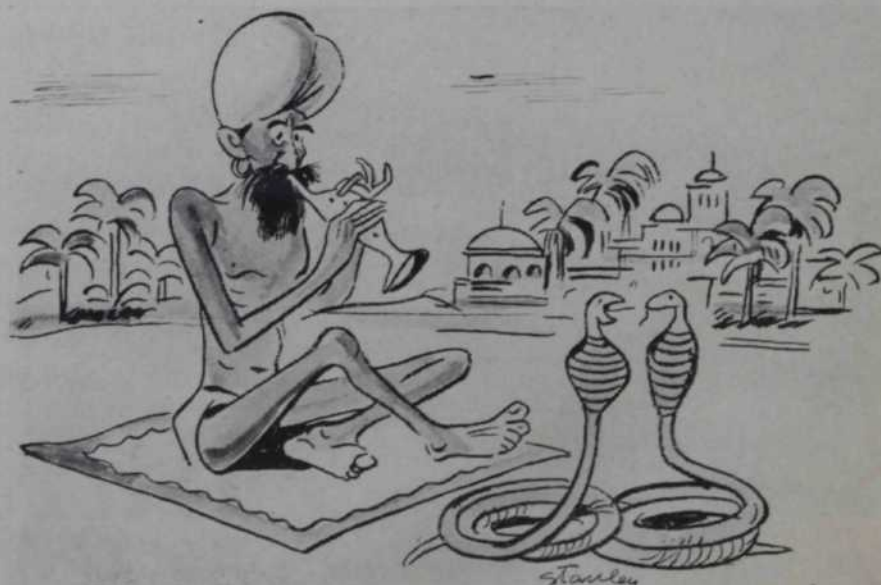
Few rubber experts expect synthetic rubber to replace natural rubber because of superior quality, if and when natural rubber again becomes available. But the trade agrees that synthetic rubber production should be maintained in the postwar period:

First, it would insure the nation against again being cut off by war from its sources of strategically necessary rubber.

Second, it would tend to stabilize the price of British and Dutch controlled (before war) Far Eastern rubber, which has ranged from a low of 2½ cents a pound to a high of \$1.25 within a 15-year period.

Third, it will have definite uses in which it is superior to natural rubber.

Various plans for maintaining the industry artificially after the war—if arti-



"Let's sit this one out"

LOOK SOUTH
LOOK AHEAD



Hub of the New World

Below the Gulf of Mexico, the countries of Central and South America are coming of age. Above the Gulf, lies a nation which has already reached industrial maturity . . . our own United States.

Thus, because of its strategic location, the South is destined to become the Hub of the New World; the crossroads for the growing trade and commerce of the Americas.

Fortunately, our Southland is ready for this important role . . .

It is blessed with a favorable climate, an abundance of raw materials, unlimited natural resources.

It has a plentiful supply of power and of efficient, intelligent labor.

It has dependable, economical transportation . . . the Southern Railway System . . . to link farm with factory, mill with mine, bustling industrial cities with busy ports.

Today, the Southern Railway and the Southland it serves are dedicated to Victory. Tomorrow, they will be dedicated to the rewarding tasks of Peace.

Then, the gleaming rails of the Southern, crisscrossing this Hub of the New World, will help to weld a union of friendship and prosperity for all the peoples of the two neighboring continents.

Look Ahead—Look South!

Ernest E. Harris
President

SOUTHERN RAILWAY SYSTEM

The Southern Serves the South

OIL Precious at Home . . . Priceless when shipped by CONVOY



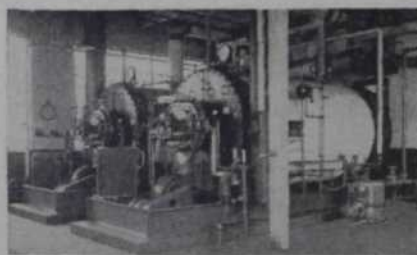
RATION coupons are positive reminders that oil has gone to war and that what there is of it must be used wisely and sparingly.

But OIL—shipped and convoyed over thousands of miles of submarine-infested seas—is priceless to fighting men on world-wide fronts—for “OIL” means power to move and fight with countless combat machines . . . it means fuel to operate many types of indispensable equipment—water-distilling units, disinfectors, sterilizers, hot-water and steam plants—vitally necessary for the health and welfare of troops, wherever in action.

Production of oil-fired equipment of the latter class has long been our war-time job. Performance reports from overseas again attest the long recognized reputation for the far-above-average efficiency of Cleaver-Brooks equipment—its reliability under severe conditions of service—its ability to utilize the highest possible percentage of heat

value from every ounce of priceless, convoy-shipped fuel-oil.

The “know-how” which enables us to meet many difficult war assignments in design and manufacturing will be concentrated with equal skill in developing and making products for tomorrow.



Cleaver-Brooks oil-fired steam generator of the type in service at military bases. Cleaver-Brooks products include bituminous heating equipment and special units for the armed forces for water-distilling, bathing, disinfecting, sterilizing and other important hygienic needs.

Cleaver-Brooks

MILWAUKEE 9, COMPANY

WISCONSIN



ficial means are necessary—are in the discussion stage.

One would require that all government purchases of rubber products, including those of the Army and Navy, specify the use of synthetics. Thus the taxpaying public would pay the cost of insuring continued production.

There are also indications that synthetics may need no artificial means of holding their markets open, even with natural rubber available.

As they see it today, tire production men predict an annual demand for synthetics ranging from 100,000 tons to 350,000 tons (half the U. S. synthetic program output) for fabrication into tire treads and other products.

Synthetics earned a market

FOR years synthetic rubber compounds have been giving better service than natural rubber in many products because of their greater resistance to oils, acids, alkalis and other chemicals.

Gasoline pump hose, for example, long has been made of synthetic compounds because of this characteristic. The adaption of these compounds for industrial uses has been increasing.

Another possibility is the absorption of synthetic rubber plant output by other than rubber fabricating lines. Principal components of synthetic rubber are styrene and butadiene.

Styrene also is a base material in the manufacture of plastics, a rapidly growing field, and new uses are being discovered for butadiene.

The question of price competition between natural and synthetic rubbers in postwar markets is complicated by many imponderables concerning both.

Because of war conditions and uncertainties in the future, a competitive market price for synthetics cannot be accurately predicted. Many experts believe that synthetic rubber could be produced in a normal market for 15 cents a pound.

The price of natural rubber, set by the British-Dutch combine, averaged 19.9 cents in 1940.

The 15-cent estimate on synthetic rubber probably arises from the prewar price of industrial alcohol, from which butadiene may be made.

Experts in the rubber trade say that, under normal conditions, Far Eastern natural rubber could be delivered in this country for 12 cents a pound.

But there is serious doubt that “normal” conditions, that is, conditions comparable to prewar times, ever again will prevail in the Far Eastern rubber growing areas.


It is said the Japanese invaders could not destroy the Far Eastern rubber plantations even if they chose to do so, because of the tremendous job it would be to destroy, or to injure permanently, millions upon millions of trees.

That is so. But rubber plantations can destroy themselves. Rubber trees have been highly bred for greater productivity. They are subject to diseases that may spread unless treated promptly.

In less than a year an abandoned plantation would be overrun with dense

"Scorched Earth" by Radio

...new weapon of war



It happened in France in '43—
the harvest was in—granaries full.
His Ukrainian "breadbasket" in
danger . . . the Nazi hurried
for the food of France—but
found famine awaiting him instead.
Radio's "Voice of America"
beamed at the farmers of France
had neatly crossed him up.

Anticipating Nazi intentions
American shortwave broadcasts
had forewarned the French . . .
urged them to withhold crops
hide what they couldn't use;
burn what they couldn't hide.
They did—under Nazi penalty of death.
Burning mills, crops and barns
greeted the Hun—for *him*
famine had arrived by radio.

So—add another triumph to
the wartime laurels of American Radio—
it fights on the "3rd Front"
where men's minds—not bodies—
are target and battlefield too . . .
where the will to win
is the mission.

☆ ☆ ☆

On that vital "3rd Front" . . .
transmitters and communications
equipment engineered by Westinghouse
play an indispensable role.
New advancements today . . . in
television . . . FM . . . electronics . . .
will tomorrow enable broadcasters
to render even greater service
to our country.

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PLANTS IN 25 CITIES . . . OFFICES EVERYWHERE

RADIO DIVISION *Baltimore, Md.*



Westinghouse
ELECTRONICS



"And when Mary joined the Waves..."

I thought we were sunk!"

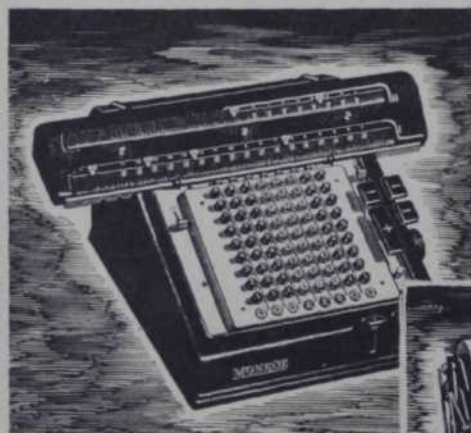


Manpower shortage may compel you to temporize with some of your office routine, but the figures and records required for the administration and control of your business must be on time . . . ready when needed . . . accurate.

Payroll calculations and records, statistics and special reports, invoices, costs, and inventory records, posting and accounting procedures—these are the life blood of business and the job of Monroe is to keep this vital work flowing.

Call the nearby Monroe branch. Our representative will explain the availability of Monroe Calculating, Listing and Accounting machines under existing conditions. His counsel and experience will be helpful in suggesting short cuts and simplification of your work to save vitally precious hours.

Ask about our Guaranteed Maintenance Plan to keep your Monroes in top operating condition.



Monroe MA7-W Calculator

A timely example of Monroe's special wartime service is the new book—

MONROE SIMPLIFIED METHODS FOR PAYROLL CALCULATIONS

Ask the nearest Monroe Branch for a copy...or write to Monroe Calculating Machine Co., Inc., Orange, New Jersey.



Monroe 209-485-191 Accounting Machine

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CALCULATING, LISTING, AND ACCOUNTING MACHINES

jungle growth. When plantations are first laid out, the jungle is cut down, dried in the sun, and burned before trees are set out.

But a jungle-choked plantation presents a more serious problem. To save the producing trees, the jungle growth would have to be cut and hauled out, and the cost of such rehabilitation, particularly if the product were going to face price competition from U. S.-made synthetics, might lead many plantation owners to abandon their business.

The effect of war on Far Eastern labor also might have serious effect on postwar natural rubber prices.

Each plantation acre has on it from 100 to 120 rubber trees which must be tapped at least 150 times a year, or about every other day, for efficient production.

The tappers plus the jungle-battling maintenance crews represented vast labor native forces. These natives were paid an average of 15 cents a day. Their pay constituted the major cost of plantation operations.

Natural rubber and cheap labor

TWELVE-cent rubber depends on 15-cent labor. Will Far Eastern natives work for 15 cents a day in the bright new postwar world?

It may be that some day these natives, tired of bombs, gunfire and new orders, will joyously welcome back their old masters, and be glad to work for their old rates. Not until war ends will that be known. But, if the era of 15-cent labor has ended, so has natural rubber's price competition with synthetics made in the U. S.

End of the war will find the world with nearly twice its former rubber producing capacity, counting the new synthetic production and the prewar capacity of the Far East.

It is entirely possible that the end of war will bring a rubber demand twice as great as before the war, a demand created by army-introduced mechanical mobility throughout the world, and the construction of thousands of miles of military roads in lands that never before could have used automobiles.

In that case natural laws of supply and demand may be allowed to govern the disposition of rubber, both here and abroad.


The rubber industry is convinced that the postwar world will have use for all the rubber it can produce. It also is convinced that it can produce better synthetics than GRS—but it agrees, nearly to a man, that GRS was the best possible compromise in the war emergency.

Meanwhile it is going about the problems of synthetic rubber fabrication with a speed that causes its technologists to warn:

"Better be careful how you say that. It's true today, but it might not be in another 30 days. We probably will have it licked by then."

The spirit is indicated by a card under the glass top on the desk of a rubber executive:

"What do you mean, it can't be done? It IS being done."



The Arabs had a number for it!

THIS ad is about *nothing*. We mean it—nothing. Nought. Zero. Ought. Cipher. . . . But don't get us wrong. The zero is just about the most important invention in the history of mathematics.

- An Arab used it for the first time centuries ago. (Although he may have got it from the Hindus.) Don't ask us his name or where he lived or when. Maybe he was a boss-man, like a sheik or a caliph. Or maybe he was some little-shot who couldn't even pay the mortgage on his camel. We don't know. History doesn't tell us.

- There's another figure-work invention—only it's 20th century. We *do* know *its* name—and we don't need history to tell us—because it's being used *today* for up-to-the-minute, objectively interpreted facts and figures. It's so intimately associated with adding-calculating machines—so closely connected with getting a job done quickly, economically and accurately—that misinformed people have frequently misused the name as part of every-day language. Actually, it is a trade-mark registered in the U. S. Patent Office, it belongs exclusively to us, and the name is:

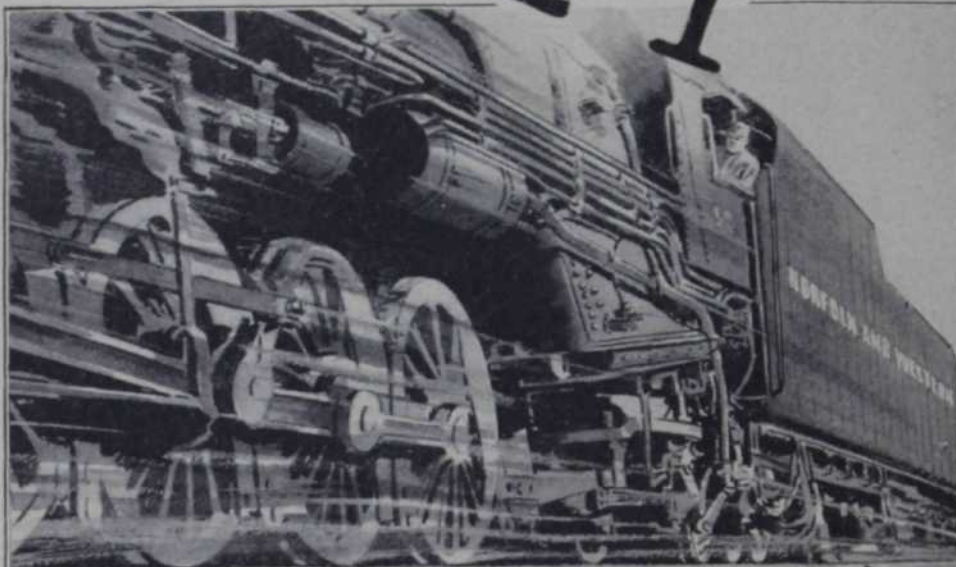
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FELT & TARRANT MANUFACTURING CO.
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N. W. AYER & SON

1944



1943 1942 1941 1940 1939

In this war, the American railroads are doing a job that some said was impossible — and by many odds, it seemed impossible. Here is the record:

In 1939, when war broke out in Europe, freight traffic took the sharpest upturn in years. In 1940, when America's national defense program got under way, traffic continued to climb. In 1941, freight traffic surpassed the record year of 1929. In 1942, freight and passenger traffic shattered all existing records — ton-miles exceeding 1941 by 34 percent, and 1918 by 57 percent. Passenger traffic topped '41 by 83 percent, the record year of 1920 by 15 percent, and 1918 by 26 percent.

But the end was not yet. In 1943, the railroads again shattered all records. They handled more freight and more passengers than in 1918 — peak year of World War 1 — plus the entire year of 1939! And they moved this greatest traffic in history with far less equipment than in 1918. How did they do it? By the expenditure of billions of dollars in pre-war years for improvements and increased efficiency all along the line, the all-out effort of their employees, and the close cooperation of the public and military authorities.

What about 1944? As our offensives increase in size and speed the job will get bigger and tougher. The railroads will do the job — efficiently — but materials for essential maintenance and replacements must be made available. The tide of battle in railroad transportation must never lag. For it to falter jeopardizes all for which we fight.

NORFOLK and WESTERN Railway

ONE OF AMERICA'S RAILROADS ... *All* UNITED FOR VICTORY!

BUY MORE WAR BONDS

Design for Law-Making

(Continued from page 34)

turned down when he sought to get the records of the Bureau of Internal Revenue Collector's investigators.

The Senate and House have let the matter pass. But, as a result of Stamm's activities, these two finance committees have come to formulating their own tax programs irrespective of Treasury arguments.

In this and other arguments with the executive branch Congress takes the view that it was created as the overall body of the people and therefore intended to be the most powerful. That contention immediately meets the challenge to show just where the Constitution provides for that. The answer is that it is provided in Congress' overall authority to provide the funds for the executive and the judicial branches. The Founding Fathers, at the outset, contemplated that electors of the various States, over whom Congress would have a hand, would elect the President and Vice President. Then along came political parties which bound the electors in advance to vote for the party candidate. From this, Andrew Jackson insisted he was a "representative" of the people, directly elected by them. From then on we have had the continual struggle between "strong" Presidents and the legislative branch.

Congress subordinated

MR. Roosevelt is a "strong" President and his tendency has been to subordinate the legislative branch. It is now itching to get back its influence. But as Messrs. Maloney and Monroney and others in Congress see it, the legislative branch is fighting a losing battle because it doesn't have the expert advice which is available to the bureaucracy.

Messrs. Maloney and Monroney believe the outstanding need is for expert and scientific assistance to Congress. They think the committees should be staffed with experts.

There is an old school in Congress which insists that the solution of the problem is to return the working out of our affairs to the states and community governments. There is no need of arguing, those of this thought say, whether the people simply gave up in trying to solve their own problems and passed them into Washington, or whether Washington gobbled up these problems with a view to increasing its power. The result has been for Congress to pass the buck by setting up the bureaucracy which now threatens to devour it.

The thing to do, these gentlemen say, is to dismantle the bureaucracy, and return the problems to the local gatherings where they belong.

But Messrs. Maloney and Monroney and those of their thinking say that, if Congress doesn't get the expert and scientific assistance it needs, it won't be able to dismantle the bureaucracy.

Skilled Work from Green Hands

By ART BROWN



Inexperienced help is trained to do better work than experienced machine operators of pre-war days could do

SINCE 1939, Pratt & Whitney Aircraft, which builds high-powered, air-cooled, radial engines (the Wasp, Jr., Wasp, Twin Wasp and Double Wasp) has increased production fifteenfold.

Today, this company has more men and women in supervisory jobs than it had on its whole pre-war pay roll.

In June, 1940, Pratt & Whitney turned out engines with a total rating of 547,950 horsepower. Recently it has shipped from its plant in East Hartford, Conn., engines at the rate of 5,000,000 horsepower a month. This, say military authorities, is more horsepower than Germany's entire airplane engine industry was able to produce at its peak.

The rated horsepower of the engines which the company has built since May, 1940, exceeds our country's total electrical generator capacity, and merely testing them in the plant consumes 12,000,000 gallons of gasoline a year.

"That's enough gasoline," say company officials, "to fill a train of tank cars more than six miles long."

But that's only part of the story.

Pratt & Whitney has not only stepped up its production tremen-

DESPITE a late start, American industry is today far ahead of the enemy in producing power plants for airplanes. Here's how one company is doing its job

dously but has, at the same time, increased the hourly earnings of its workers—and reduced its costs 30 per cent. At the August rate of production, this cut in costs saves the taxpayers nearly \$20,000,000 a month.

Reason for results

ONE of the things which has made all this possible—in the face of an acute shortage of skilled labor—is the company's comprehensive training program.

Pratt & Whitney Aircraft takes green workers, men and women, young and old—many of whom have never even been in a factory before—and makes of them highly skilled, efficient and enthusiastic producers.

By way of illustrating how well this program works in practice, company executives point to one department which—manned by "experienced"

workers—was not able to make its schedule, but which, when taken over by *trained* workers, set new records.

Each department in the plant has a fixed production schedule. When a department beats its schedule, the saving is divided as a bonus among all the workers in that department.

This one department, working on parts for a new model engine, kept falling behind. Instead of earning a bonus, it "owed the company money." The problem was studied, the production schedule was found to be fair. So it was decided to move the "experienced" workers, supervisors and all, to other jobs—and to staff the department with a whole new crew of workers trained by the company.

Almost immediately after this was done the erstwhile low department exceeded its schedule. The former workers in the department were then given an opportunity to take a refresher

training course at their regular pay. Pratt & Whitney Aircraft was established in August, 1925, in one corner of the old Pratt & Whitney tool plant in Hartford. The new company employed 25 men, mechanics and engineers. By Christmas they had completed and were testing the first Wasp engine, 410 horsepower.

By March, 1926, the engine had passed Navy tests and the company received an order for six. By 1927, Wasp engines were carrying mail across the Rockies for Boeing Transport. In 1939—13 years after the first Wasp was completed—the company finished the first 150-hour test run of its first 2,000 horsepower engine, the Double Wasp, 18 cylinders.

Wasps power many planes

TODAY, Pratt & Whitney engines power some 70 different types of planes made here and by our allies—everything from trainers to high-altitude fighters, bombers and transports.

American-built planes (more than 40 different types) equipped with Pratt & Whitney engines include: the Navy's Corsair and Hellcat, which are in the 400-mile-per-hour class, with a

range of more than 1,500 miles and a ceiling of more than 35,000 feet; the Army's Thunderbolt, with which the Eighth Air Force recently set a distance record by escorting heavy bombers to Emden from England; the Liberator, Marauder, Boston, Devastator, Catalina—bombers; the Sky-master, Skytrooper, Commando—transports; the Navy Blimp, the Coronado and many others.

31 variations in models

PRATT & Whitney engines vary in size from 450 horsepower used in trainers to 2,000 horsepower, used in bombers and high-altitude fighters. The company produces 31 variations of 12 basic models of five basic types of engines, involving nine different propeller drives and nine different supercharger set-ups.

The Double Wasp is the most powerful engine now in quantity use on the fighting fronts.

Pratt & Whitney has recently announced an amazing new development which gives its present engines an added surge of super-energy in an emergency. The device, on which engineers have been working for more

than a year, has been in successful use by pilots flying Thunderbolts and certain Navy fighter planes powered with Double Wasps.

When the pilot, operating at wide-open throttle, asks for still more power to increase his climb or to step up his speed, he can, with this device, get a precious plus of power by pressing a button.

The new invention produces the "over-and-above" burst of power by injecting water into the cylinders. The water vapor cools the cylinders, permits the use of a leaner mixture from the carburetor, and lessens pre-ignition.

Pratt & Whitney Aircraft is a division of the United Aircraft Corporation. Other divisions of United Aircraft are: Hamilton Standard Propellers, East Hartford, Conn.; Chance Vought Aircraft, builders of fighter planes, Stratford, Conn.; Sikorsky Aircraft, builders of helicopters, Bridgeport.

It took Pratt & Whitney Aircraft 16 years—from 1925 to 1941—to build its first 25,000 engines. In the past three years, it has built that many, on the average, in a year.

A series of expansions

EARLY in 1939, the company was in a slump along with the rest of the aircraft industry. It had laid off nearly 20 per cent of its skilled workers. Then came a big order from the French government—and to fill that order, the plant had to be greatly enlarged and many new employees hired in a hurry.

In the spring of 1940, just as the expanded plant was reaching capacity, the company was called upon to spread out again, this time by the British. The second expansion was larger than the first, almost as large, in fact, as the original plant. In May, 1940, a third major expansion was started to help meet our own defense needs. At the end of the year, the plant was again enlarged.

Since 1940, the company has made 34 major changes in its production schedule—always leading to higher and higher production—and has never once failed to keep up with its schedule.

Military censorship prohibits publishing the exact number of men and women employed at the East Hartford plant today or the number of acres its buildings cover. But the plant is *big*—with literally miles of brightly lighted aisles and thousands of modern machines.

Although its accident rate is surprisingly low, the plant is big enough to require the full-time services of 14 doctors and 185 nurses. It operates on



Inspectors at Pratt & Whitney Aircraft check piston and knuckle pins on an electrical device which measures 1/100,000 part of an inch



when something in your budget costs **LESS**... that's news!

Perhaps you feel that most living costs are always headed in the same direction... UP.

But there is one item over which you can heave a sigh of relief—the cost of your insurance. For example: the average rate for fire insurance has declined 40% in the past thirty years; and more than 20% in the past ten years.

This is an economic achievement in which all Americans can take pride. It reflects the measures taken by property owners and municipalities to reduce fire losses. It reflects the promptness with which insurance companies have passed savings on to policy-

holders. Also very important in this picture are the services of local agents and brokers—the men who fit modern insurance to your individual needs—who give you prompt assistance in event of loss.

It is finally worth remembering that when your policy is with a capital stock company such as those comprising the Aetna Fire Group, it is backed by *both* a paid-in capital and surplus. You are never liable for assessment.

**Don't Guess About Insurance
—CONSULT YOUR LOCAL
AGENT OR BROKER**

Since 1819 through conflagrations, wars and financial depressions, no policyholder has ever suffered loss because of failure of the Aetna to meet its obligations.

WARS	CONFLAGRATIONS	DEPRESSIONS
1846 Mexican War	1835—New York City	1819
1861 Civil War	1845—New York City	1837
1898 Spanish-American War	1851—San Francisco	1843
1917 World War I	1866—Portland, Me.	1857
1941 World War 2	1871—Chicago	1873
	1872—Boston	1893
	1877—St. John, N. B.	1907
	1889—Seattle; Spokane	1921
	1901—Jacksonville, Fla.	1929
	1906—San Francisco	
	1908—Chelsea	
	1914—Salem	
	1941—Fall River	

The Aetna Fire Group

HARTFORD, CONNECTICUT

Aetna Insurance Co. • The World Fire & Marine Insurance Co. • The Century Indemnity Co. • Piedmont Fire Insurance Co. • Standard Insurance Co. of N. Y. • Standard Surety & Casualty Co. of N. Y.

NATION'S BUSINESS for January, 1944

55

three shifts, 24 hours a day, seven days a week.

Not only did the company enlarge and re-enlarge its plant, but, to avoid housing and traffic congestion, it also set up five satellite plants within a radius of 25 miles of East Hartford. The crankshaft department became a full-fledged factory at East Longmeadow, Mass., a suburb of Springfield. The crankcase department became a plant at Willimantic, Conn. The cylinder departments moved to Southington. A miscellaneous small parts plant was established at Buckland. The piston operations went to Hartford.

Each of the first three of these "shadow" plants is now about as large as the home plant was in 1939.

Built by licensees, too

IN addition to all this expansion, Pratt & Whitney Aircraft licensed other manufacturers to build its engines at a nominal fee of \$1 per unit. Licensees are: Ford Motor, Chevrolet Motors, Buick Motors, Nash-Kelvinator, Continental Aviation and Engineering, Jacobs Aircraft Engine Company—and, in Melbourne, Commonwealth Aircraft, Ltd.

The licensees were not able to start production merely by picking up the blueprints. The East Hartford plant devoted 461,470 man-hours to the job of instructing their engineers and production men in airplane engine building.

Each licensee builds one certain "frozen" model. The home plant carries on all experimental and development work. In recent months, it has been putting through engineering improvements—some small, some large—at the rate of 1,700 a month.

Pratt & Whitney uses a huge network of sub-contractors. From the outside comes a steady stream of magnetos, carburetors, spark plugs, springs, terminals, wiring set-ups, nuts and bolts. Fittings for the engine are made, in fact, in half the states in the Union, most of them east of the Mississippi. The principal parts, however—crankcases, crankshafts, master and articulated rods, cylinders, gears, knuckle pins, pistons, etc.—are made by the company itself. The company "makes the engine," a

precision job that calls for expert workmanship. Critical tolerances are within one or two ten-thousandths of an inch. Certain moving parts are subjected to pressures as high as four tons per square inch. A scratch on one of the highly polished surfaces of such a part might result in damaging the whole engine.

The parts are handled with great care. The workers dip their hands in lanolin to avoid getting perspiration on the surfaces and causing corrosion. The finished parts are hot-oiled, cooled to make the oil stick, then wrapped in wax paper or put away in cardboard boxes until needed.

When the engine is assembled, it goes into a test cell, is hooked up with all manner of indicators, and run for five hours. Then it goes back to the shop and is torn down for complete inspection.

In one of the big engines, there are about 10,000 pieces. Laid out for inspection, they cover two tables each six feet wide by 35 feet long.

Sealed in semi-vacuum

AFTER the engine is re-assembled, it gets another test run before it is cleaned and put in final order. Approved by military inspectors, it is then sealed in a large Pliofilm enve-

lar operator was torn between the desire to get out production and to teach the new man. Scrap went up."

The company's training program got under way early in 1940. Today Pratt & Whitney Aircraft is more than a modern industrial plant. It is also a modern industrial university—with classrooms, up-to-date teaching equipment and able instructors. The company has more men and women in its classes these days than it had on its full pay roll before the war.

Operators do varied work

MOST of the machined parts which go into the engine are turned out on standard machine tools. Before a worker can become an operator of one of these multiple-purpose machines, he must—regardless of his or her previous experience—graduate from the company's Machine Operators' School.

The course lasts six weeks, eight hours a day, six days a week; includes blueprint reading, shop mathematics, precision instruments, theory of cutting tools. Students are paid at a base hourly rate while training. This one school has more than 100 instructors, most of them former shop men who have been especially trained as teachers. "The graduates," says the machine shop superintendent, "do better and more varied work than most 'experienced' operators of pre-war days could do."

The company's policy is to promote from within and to advance a worker as rapidly as he is able to handle a bigger job. Workers, selected by their foremen for their ability and desire to learn, have the privilege of attending an Upgrading School. The course lasts five weeks, and trainees receive their hourly base pay while in school. On completing the course, they are given a higher-type job—and after

working on that job for three months, may go back to school for still further upgrading.

The company operates a school for training advanced machinists (men and women with two or more years' shop experience) for work in the Experimental Machine Department in which the engine development work

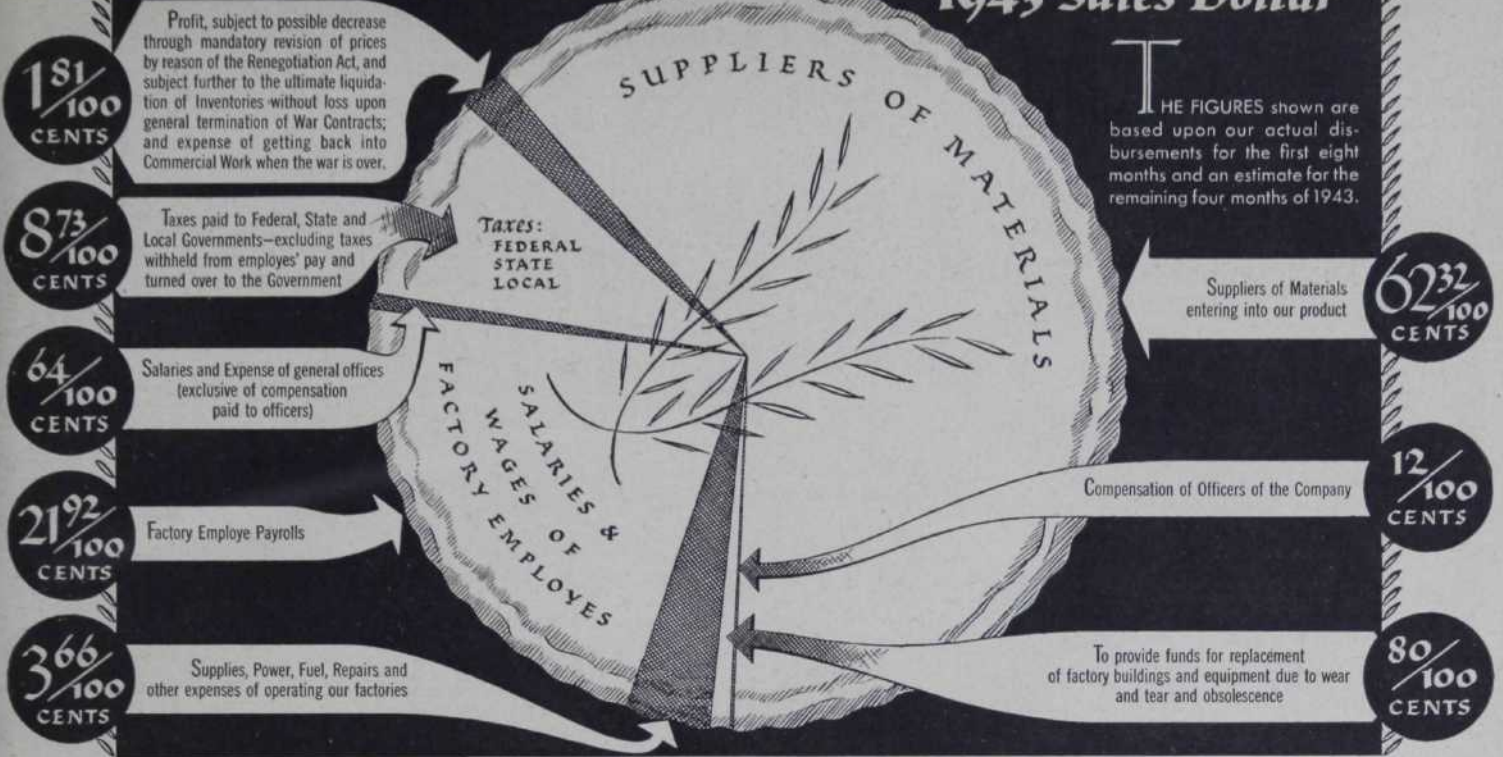


"She plays boogie-woogie piano for a hobby"

lope in semi-vacuum and packed for shipping.

"When we first started expanding the plant back in 1939," says the supervisor of personnel, "we simply hired an extra worker for each machine and had the machine operator break him in. That was a stop-gap measure, but it didn't work. The regu-

Distribution of PULLMAN-STANDARD'S 1943 Sales Dollar



...AND WHEN THE PIE WAS OPENED HERE'S HOW IT WAS SHARED

Out of every dollar received by Pullman-Standard for a vast array of war matériel 98 and $\frac{19}{100}$ cents was paid out in carrying on the operations of the business

Here's the story of your "Armament Dollar". What happened to it? How was it divided? What did it buy?

It bought swift ships that hound submarines to destruction. It bought husky tanks; parts for anti-aircraft gun mounts; trench mortars; howitzer carriages; mounts for guns; bombs and shells—shells by the million.

It bought wing and tail assemblies for huge transport planes.

It bought troop sleepers; freight cars for the Army and Navy; hospital cars and freight cars for the Railroads to transport war matériel; Transit equipment for the transportation of war workers.

All these implements of war were made by Pullman-Standard and paid for with your "Armament Dollar".

What becomes of that dollar?—Look at the pie chart above.

62 and $\frac{32}{100}$ cents—more than half—in sums ranging from less than \$100 to over \$1,000,000—was passed along to many thousands of material suppliers, large and small, working partners in an epic of industrial teamwork. Here, truly, is a spread-the-work program that is helping to bring Victory.

21 and $\frac{92}{100}$ cents went to Pullman-Standard's factory employees—that resourceful, persistent, loyal army!—for salaries and wages. These people have made usable suggestions by the thousands—found short cuts in manufacturing and better ways of speeding operations that have

saved many thousands of man-hours. Pullman-Standard's long experience has saved many thousands of tons of steel, turned out finished products months ahead of schedule, saved incalculable dollars for America's taxpayers.

Only $\frac{12}{100}$ of a cent was paid as compensation to officers of the company, while $\frac{64}{100}$ of a cent went for other salaries and expense of general offices.

3 and $\frac{66}{100}$ cents was spent for supplies, power, fuel, repairs and other expenses of operating our six factories. $\frac{80}{100}$ of a cent must be set aside to provide funds for replacement of factory buildings and equipment due to wear and tear and obsolescence.

Look now at 8 and $\frac{73}{100}$ cents—nearly 83 per cent of earnings—for taxes—Federal, State and Local; a heavy item to be sure, but this is Pullman-Standard's contribution to the cause of a free people defending their Freedom.

And what did Pullman-Standard retain from each dollar?—1 and $\frac{81}{100}$ cents. And that is subject to possible deductions as shown in the pie chart above. What is left is available to pay dividends to Pullman Inc.'s 34,773 men and women stockholders, the investment of whose savings have maintained the organization, facilities and working capital that have made this company a vital armory of Freedom.

And when peace comes once again ours will be the task to help build better, more comfortable, more convenient Transportation for the World of Tomorrow.

PULLMAN-STANDARD CAR MANUFACTURING COMPANY

Chicago, Illinois . . . Offices in seven cities . . . Manufacturing plants in six cities

© 1943. P. S. C. M. CO.



COLUMBUS DIDN'T HAVE ONE

COLUMBUS did his navigating with a dime-store compass and a piece of string. But all he discovered was America. Boy, what exploring the push-button admiral of the future will be able to do with this self-aligning, automatic, instantaneous astrolabe.

We don't know if there is going to be such a thing but if there is and it's in the realm of electronics (there's that word again) Cannon plugs will be in there pitching.

For wherever quick, complete, sure electrical connections must be made—whether to carry a single circuit or a maze of circuits—a Cannon plug is indicated. Nothing less is so surely satisfactory. Nothing better can be had.

Panel Type DP-N26 (pin and socket insert assemblies shown) is one of the many types of Cannon Connectors that will serve radio and instrument applications of tomorrow's inventions as well as they are serving today's products. We'll be glad to send you a copy of the new second edition TYPE DP Bulletin.



CANNON ELECTRIC

Cannon Electric Development Co., Los Angeles 31, Calif.

Canadian Factory and Engineering Office: Cannon Electric Co., Ltd., Toronto

REPRESENTATIVES IN PRINCIPAL CITIES—CONSULT YOUR LOCAL TELEPHONE BOOK

is carried on. Other schools teach precision inspection, tracing, detailed drafting, job methods, and knowledge of engine parts. There are also schools for training supervisors, foremen's clerks, personnel workers and instructors; schools for training graduate engineers for specialized work, and for transforming outstanding workers into foremen.

As part of its foremen training program, Pratt & Whitney produced a film called, "It's Our Job," in which a foreman tells about his mistakes and successes. This film is now being used nationally by the Air Service Command in training civilian supervisors, and is being distributed to Army and Navy arsenals and shipyards where civilian personnel is employed.

Three service schools

TO TRAIN men to install, overhaul and maintain its engines, Pratt & Whitney operates three big service schools. One is for active flight officers, squadron engineering and base engineering officers. Located at Brainard Field, Hartford, it has more than 40 instructors; each an expert in one certain phase of the engine. The course lasts eight weeks and includes actual test work in the plant.

The other two service schools are in the plant. One is for training enlisted men for maintenance work, or giving them "post-graduate" work in engine upkeep and for training maintenance men employed by the users and licensed builders of Pratt & Whitney engines, the other is for training men to become the company's own service representatives and consultants.

To prepare young women as engineering aides, the company has established 200 aircraft fellowships in ten universities and colleges. The course lasts 40 weeks. Each Fellow receives full expenses, except for clothes, and agrees to a one-year option on her services.

"About 90 per cent of all the workers we hire nowadays have had no previous experience," says the company's director of training. "They come from all walks of life: retailers, bankers, brokers, salesmen, artists, auto dealers, housewives, retired clergymen, school teachers, college professors, farmers."

"When we get tooled up for production of our new engines, we're going to have to increase our force by about 30 or 40 per cent. But give us people of normal intelligence who want to learn and who want to do things—that's all we ask—and we'll do the rest."

"Our courses are set up, not to make specialists, but to develop capable, well rounded workers. Our attitude is that there's no limit to how far an individual can go, provided he or she is willing to work."

Pratt & Whitney was the first company in the aircraft industry to be awarded the Navy "E". That was in March, 1942. Since then, it has received three six-month stars for continued excellence. Some of the experimental and research projects on which the engineers are now working will take at least five years more for completion.



... and WHAT a foxhole !

You're right, soldier, it is a foxhole. Not the kind you dug in Tunisia or Guadalcanal—but just as important in conducting offensive measures against the enemy.

In this kind of foxhole, vast beds of coal and ore are uncovered at depths of 100 feet and more—to permit mining from the surface with modern excavators—to do it faster, with fewer men—without tedious hand methods.

These huge open pits are a tribute to America's mass production methods—to the big electric shovels that dig day and night to feed smelters, blast furnaces, cement mills and other vital industries with the raw materials we need to win.

Yes, they're far behind the lines of actual combat. But you can count on the P&H Electric Shovels to stay in the fight until the last shot has been fired. Then, they'll resume their peacetime jobs to help build the better world of the future.



HARNISCHFEGER
CORPORATION

EXCAVATORS • ELECTRIC CRANES • ARC WELDERS  HOISTS • WELDING ELECTRODES • MOTORS

Overhead Cranes • Electric Hoists
Excavators • Welding Positioners
Arc Welders • Welding Electrodes

MILWAUKEE 14, WISCONSIN



What Will U.S. Day do to Your Postwar Plans?

U.S. DAY...that's Unconditional Surrender Day! Postwar will have arrived! You'll need your working capital in good working condition then ... to put your postwar plans into action at once ... to meet competition.

But who can tell what day war will end? Who can tell which of your present "good risk" customers might be thrown into difficulties by a swift turn of events? What will happen to your plans if Victory suddenly deprives some of your customers of the ability to pay what they owe you? You'll be glad ... *then* ... that you decided to look into credit insurance ... *now*.

American Credit Insurance *guarantees* payment of your accounts receivable. It guarantees, *for a year to come*, that abnormal and unpredictable credit losses will not impair your working

capital ... or your credit ... or your profits. In short, it gives you certainty in place of uncertainty.

Your Credit Manager investigates, appraises and controls credits on all accounts as usual. American Credit Insurance supplements his work and fortifies his judgment ... by protecting you against defaults due to developments after (or undiscovered before) goods are shipped.

Manufacturers and Jobbers in over 150 lines of business carry American Credit Insurance. You need it too. For further information, write for our booklet, "The A-B-C of Credit Insurance," Address: Dept. 41, American Credit Indemnity Co. of N. Y., First National Bank Building, Baltimore-2, Md.

J. F. McFADDEN,
President



American Credit Insurance

*Pays You When
Your Customer Can't*

OFFICES IN PRINCIPAL CITIES OF UNITED STATES AND CANADA

Washington War Survey

From the Records of the U. S. Chamber's War Service Division

Production—United States Maritime Commission reports delivery of 25,284,287 tons of merchant shipping between January 1, 1942, and December 1, 1943, surpassing its two-year goal • Completion of 250,000 tons of naval craft, including about 12 aircraft carriers, sets new record • Bituminous coal mines establish highest weekly production record in more than 16 years in week ending November 20—12,700,000 tons • WPB Automotive Division announces increase in 1944 production of all types of commercial trucks from 33,852 to 123,492 units.

★ ★ ★

Civilian Food Supplies—War Food Administration suspends, until further notice, quota limitations on slaughter of livestock, permitting packers and butchers holding government slaughter licenses to kill livestock for civilians without restrictions; announces increase in civilian supplies of canned pineapples, asparagus, corn, pumpkins, spinach, and figs by release of supplies set aside for government purchase • War Food Administration announces release for civilian consumption of 2,600,000 cases of canned string beans and tomatoes, 990,000 cases of tomato catsup.

★ ★ ★

Petroleum—Petroleum Administrator Ickes announces that petroleum industry has finished or has under construction eight major plants, costing \$25,000,000, to meet military and essential civilian demands for lubricating oil • Petroleum Administrator certifies December production rate of 4,694,200 barrels daily to oil producing states—record production rate for petroleum in United States.

★ ★ ★

Coal—Solid Fuels Administration establishes minimum standards of quality for domestic-size Pennsylvania anthracite coal sold for domestic use under present distribution limitations.

★ ★ ★

Registration of Nurses—WMC announces nationwide registration of all graduate nurses during second week of February, 1944, as step in mobilizing nurses for war-time needs.

★ ★ ★

Employment—WMC reports 909,000 job placements in September by United States Employment Service, bringing



TWO-MAN TORNADO!

THE BAZOOKA... ANOTHER SPECTACULAR AMERICAN "SECRET WEAPON"... ANOTHER DRAMATIC STORY OF PHILCO AT WAR

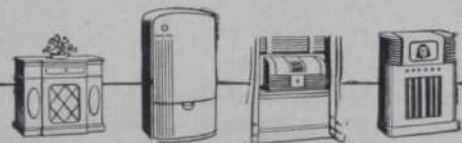


TWO MEN AND A BAZOOKA... more than a match for sixty tons of steel! Yes, that's the latest story of American ingenuity and productive skill.

A single soldier carries and fires it, his teammate loads it... and 60 ton enemy tanks, concrete pill boxes, brick walls and bridges wither under the fire of its deadly rocket projectile. It's an amazing achievement of ordnance design, conceived and developed by the Ordnance Department of the United States Army. And it's another stirring chapter in the fascinating story of Philco at war.

The men and women of the Philco *Metal* Division, whose huge presses produce the metal parts of peacetime Philco radios, have played a leading part in the final perfection and production of the Bazooka. With

their colleagues in the Philco *Radio* Division, they are turning out miracles of war equipment. After victory, their new knowledge and skill will bring you the newest achievements of modern science in radio, television, refrigeration and air conditioning under the famous Philco name.



After Victory, Philco will bring you the newest developments of war research in Radio, Television, Refrigeration and Air Conditioning. Buy War Bonds.

PHILCO

CORPORATION

Keep fit—
avoid accidents

**A small hazard
can cause a heap of trouble!**

DANGER often wears an innocent look. That's why Hardware Mutuals *policy back of the policy* provides for the most painstaking thoroughness in detecting every possible source of industrial accident.

Hardware Mutuals *policy back of the policy* has one broad precept: To make the interests of policyholders our first consideration. In Workmen's Compensation Insurance it embodies a plan of accident prevention engineered precisely to individual plant needs, and covering every conceivable plant hazard. Its tangible results are improved safety, reduced operating costs, and increased production. Claim settlements are prompt, sympathetic, direct to injured employees.

Firmly rooted in sound, efficient management, the *policy back of the policy* assures the finest possible insurance at consistent

low cost, whether Workmen's Compensation, or Automobile, Fire and allied lines, Burglary, Plate Glass, General Liability, etc. Careful selection of risks has returned substantial savings to policyholders ever since Hardware Mutuals origin. These now total over \$82,000,000.00. Experienced, full-time representatives give expert, personal service.

Don't miss the opportunities for increased savings and service inherent in the *policy back of the policy*. Our new book, INDUSTRIAL SAFETY PROCEDURE, is a concise, valuable guide to improved plant safety measures. Send for a free copy today.

FEDERATED HARDWARE MUTUALS
Hardware Dealers Mutual Fire Insurance Company, Home Office, Stevens Point, Wisconsin
Mutual Indemnity and Hardware Insurance Company, Home Office, Owatonna, Minnesota
HARDWARE MUTUAL CASUALTY COMPANY
Home Office, Stevens Point, Wisconsin
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Compensation, Automobile and other lines of non-assessable

CASUALTY AND FIRE INSURANCE

total for first nine months of 1943 to 6,980,000—39 per cent increase over same period in 1942 • WMC reports employment of women in October, 1943, as 16,400,000, compared with 10,800,000 in October, 1940; estimated need of additional 1,000,000 to round out employment shortages • WMC announces placement by United States Employment Service of 139,862 handicapped persons in first nine months of 1943—129.5 per cent increase over same period in 1942.

★ ★ ★

Manpower—ODT estimates that 62,000 jobs in transportation industries must be filled before July, 1944, to meet expected increases in traffic loads.

★ ★ ★

Conservation—ODT reports annual savings of nearly 14,000,000 vehicle-miles and 1,250,000 gallons of gasoline by taxicab operators operating under joint action plans in 22 cities.

★ ★ ★

Navy Department—Secretary of Navy reports that our combat fleet doubled its numerical strength in less than 11 months of 1943, and now totals 817 vessels; 1944 schedule is even larger by value: ships \$1,300,000,000; aircraft \$1,400,000,000; major ordnance items \$800,000,000 • Applicants for WAVES may now be promised rank and probable assignment to special types of work, contingent on successful completion of courses.

★ ★ ★

War Expenditures—War expenditures for first 10 months of 1943 amounted to \$71,105,000,000 compared with \$13,895,000,000 for year 1941 and \$52,406,000,000 year 1942 • War Department announces reduction in 1944 appropriation of \$13,163,519,000.

★ ★ ★

Industrial Plant Expansion—Of \$14,736,167,000 total volume of industrial plant expansion scheduled as of September 30, 1943, value of those having 95 per cent or more construction work in place and 95 per cent of machinery and equipment delivered was \$7,714,397,000, or more than 52 per cent of total.

★ ★ ★

Removal of Restrictions—WPB lifts all restrictions on use of wool in production of clothing, draperies, and upholstery fabrics except finer grades of alpaca; removes restrictions on use of steel in production of hooks and eyes, snap fasteners and brassiere hooks except in Labor Areas I and II.

★ ★ ★

Fourth War Loan Drive—Treasury Department announces Fourth War Loan Drive, with goal of \$14,000,000,000, beginning January 18 and closing February 15; quota for individuals \$5,500,000,000.

—E. L. BACHER



One of a series illustrating Cyanamid's many activities.

KING COTTON *Strips* FOR ACTION

As a rule, cotton plants don't shed their leaves until nipped by frost. But today you can see fields of plants almost completely stripped of leaves—long before a frost has fallen and just at the time the cotton is ripe for picking!

It is a welcome sight—to both cotton farmers and cotton pickers. For the leaves make harvesting the cotton crop a hard, troublesome job. In mechanical picking especially, many of the leaves are crushed in with the cotton, staining the fibers and lowering its market value. Our agricultural experts have long sought an answer to this problem. And today they have the answer in a special product developed by Cyanamid!

This chemical, known as AERO* Defoliant is simply "dusted" over the field

of cotton. Within a week the leaves fall. No harm is done to plants or fibers. And since it removes the leaves so effectively, the cotton is not only easier to pick—it is of a better grade because it is free of leaf trash and stain . . . and because the early bottom bolls get enough sunlight to prevent rotting. Earlier harvesting, with its many advantages, is also made possible and a cover crop may be planted where desired.

AERO Defoliant is the first practical method to be discovered for efficient, economical cotton plant defoliation. It means more and finer cotton—at a time when finer cotton is needed in tremendous

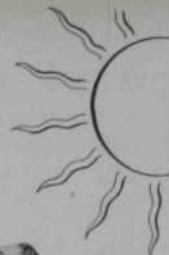
quantities. Here is another example of how far-reaching in importance the results of Cyanamid research can be.

*Reg. U.S. Pat. Off.



**American
Cyanamid Company**

30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.



THE MAGIC FLAME

will cool and heat
your home of tomorrow

What kind of climate do you like? In the bright world of tomorrow, you will be able to "make it to order" indoors—year round.

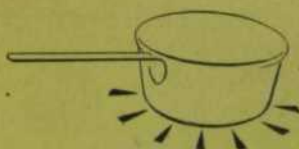
That is the promise of Servel's flame of magic.

Today, this flame is bringing silent, trouble-free refrigeration to more than 2,000,000 American homes—and to our armed forces all over the world.

When peace returns—and Servel is "mustered out" of total war work—millions more will be able to enjoy not only *this* modern convenience, but *new* ones made possible by the magic of the flame.

The Servel *All-Year* Gas Air Conditioner is one of them. Servel research engineers developed it before war came. It will be ready for you at war's end. This new and different unit will cool your house in summer, heat it in winter, ventilate it through every season.

Servel gas refrigerators and *all-year* gas air conditioners and new home appliances will mean greater comfort—better living—for you and your family. And they will also mean *jobs*—good jobs—for our fighting men when they come home again.



SERVEL, Inc.

America's Leading Makers
of Modern Gas Appliances

France Key to Post-War Europe

(Continued from page 30)

enjoys in France are the results of the French Revolution and of his own active and free participation in the nation's life since. The French peasant has survived, fighting for his rights and holding on to his land, the Revolution, the Empire, the Restoration, more revolutions, more restorations, the Second Empire, the disaster of the Franco-Prussian war. He has been the strong stabilizing support of the Third Republic.

Unlike the Russian peasant at the time of the Bolshevik Revolution, the French peasant has had a long and active political tradition as a free man and a landholder. He cannot be won with such simple slogans as "Peace, land, bread!" He has something to lose—everything, in fact—and nothing to gain from a collectivist dictatorship, either communist or of a fascist tinge. Neither the German nor the Italian peasants, at the time of the rise of Hitler and Mussolini, were comparable in political development or in their conscious economic power, with the French peasant.

The peasant, like all Frenchmen, will want to correct the errors that caused the debacle in 1940, and he will go along with any movement seeking such a correction. A number of the peasants may be betrayed into identifying themselves with some of the extremist parties. The peasant will favor any political program that promises him fairer profits, greater opportunities, a bigger share of the goods of this world. But collectivism is another matter. He will fight collectivism to the death. He has already had his experience with Fascism. He will not be fooled.

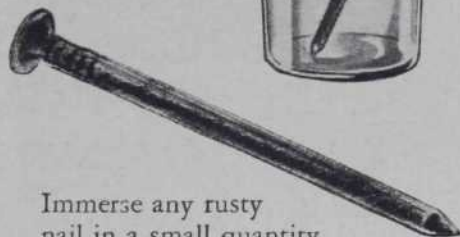
A large middle class

NOW, let us look at the French middle class. In the first place, it is still a large and vigorous class. Before the war, France was a country largely of small businesses and of small industrial establishments. For the larger part, the doctors, the lawyers, the teachers, the technicians, especially in the provinces, identify themselves with this class. Politically, the French middle class has remained conspicuously loyal to the French Revolution. It has fought obdurately and bitterly for the principle of private property and Free Enterprise, and it has won the battles.

Again, from the viewpoint of revolution, no such large and politically experienced middle class existed in Russia at the time of the Bolshevik Revolution. The German middle class was unaccustomed to independent political life at the time of the formation of the Weimar Republic, and the subsequent political ineptitude of the German middle class played a key role in the intrigues which brought Hitler to power.

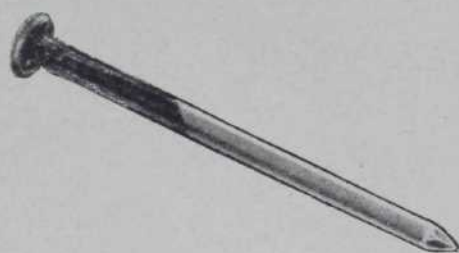
What to do about Rust?

*Make
this Test*



Immerse any rusty nail in a small quantity of Cities Service Rust Remover. If badly rusted, allow to remain for several minutes. You can actually see the rust dissolve.

See The Results



Remove nail and wipe dry with cloth or tissue. Note the complete absence of rust and the way the original surface reappears.

CITIES SERVICE RUST REMOVER has been tested for four years throughout a small, highly industrialized area in the East, where it has earned a unique reputation for performance. RUST REMOVER is a clean, clear liquid, practically odorless, non-inflammable, easily applied, and harmless to handle by those not allergic to specific chemicals. It is fast-acting, and, although heating somewhat accelerates results, general application is recommended at normal temperature (60°-90°F.). RUST REMOVER is effective on chromium, copper, aluminum, steel and iron.



5 Big Advantages

1. Non-Inflammable
2. Harmless to Normal Skin
3. Makes Metals Chemically Clean
4. Curbs Normal Corrosive Influences
5. Free from Muratic, Sulphuric, Nitric and Oxalic Acids or Cyanide.

See a Free Demonstration of Rust Remover on Your Own Equipment.

(Available only in Cities Service marketing territory EAST of the Rockies.)

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Gentlemen: I am interested in your
RUST REMOVER demonstration as
offered in Nation's Business.

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Company.....
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City.....

THE HEAVENS

AND THE EARTH..



The Stars—always the wonder of the human race—have more than ever become a guide and a savior to man in this War, though they are largely eclipsed in our thoughts by the sciences of the Earth and the Air.

Celestial navigation—for centuries the guiding protection of mariners—is now guiding our Bombers and Air Transports over thousands of miles of trackless ocean and uncharted wilderness, day and night, with uncanny accuracy.

Thorough training in the science of the Heavens is as important to our long-range Air Navigators as their training in the use of compass, radio and instruments. Like the Pilots who fly them, these Navigators receive much of their air training behind reliable engines built by Jacobs.



JACOBS Aircraft Engines

POTTSTOWN • PENNSYLVANIA • U.S.A.

There was no such middle class as France possesses, a class with a long democratic tradition, in Italy when Mussolini came to power, nor in Spain when Franco succeeded in taking power.

These are the differences that count. When you speak of the French middle class, remember it is the only middle class in Europe with a successful revolutionary tradition. It is not in the habit of having things done for it: it has handled its own affairs. It has maintained its position, its rights and its possessions through its own political efforts and its own political leaders.

No communist dictatorship can succeed in France without first destroying this class. Already the French middle class has learned the lesson of Fascism—that Fascism or Nazism inevitably destroys the middle class.

Let us look at the French working class. There is no question but that a large portion of it is Bolshevik in its tendencies. Admiration for Russia, whose achievements in this war are certainly worthy of admiration, will undoubtedly tend to stimulate a communist trend that will strengthen this section of the working class.

However, another large section of the workers is socialistic in a belligerently anti-Bolshevik sense. The Communists and the Socialists may, and no doubt will, find a basis for unity of action when it comes to driving out the Fascists, but they will quickly separate as they have in the past before the threat of a Communist dictatorship.

Finally, we should not forget the Catholic Youth movement, which stands for class collaboration and the principle of private property.

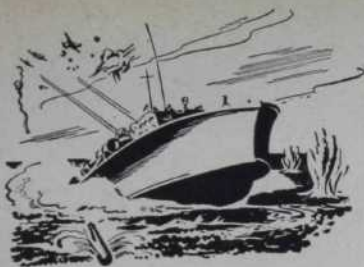
Unquestionably, immediately after the war the French working class will make up the largest and the best organized political force. But as France returns to normalcy, the peasantry and the middle class will rapidly gather their strength for effective opposition.

Capitalism resurgent

WHEN I speak of a resurgent capitalistic and democratic France, I don't mean a France returned to the confused, short-sighted and strife-torn conditions of 1939. I mean a progressive France capable of coping with the problems of a dynamic economy, such as capitalism.

France was intactly capitalistic when it fell. Leaving aside the complex question of France's World War I war debt, until the United States Treasury and the British Government froze all French funds, the French Government scrupulously met its every foreign obligation in dollars and sterling. From the viewpoints of the American business man, France has never been guilty of capitalistic bad faith.

I think it can be granted me on the basis of my four decades of practical and active preoccupation with French industry and business that I know something about France. I say confidently that, when the war is over, France will again become on the European continent the liberal and civilized vanguard of Western capitalism and democracy.



Fresh food on the high seas during long, heavy-action periods away from port is the result of compact, efficient refrigeration.



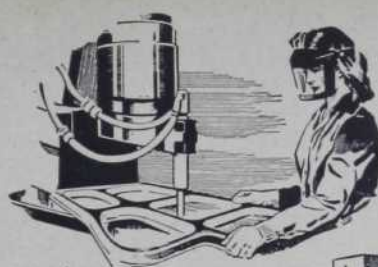
Self-Contained
¾ h.p. Refrigerating Unit



Cool, clean air protects the life of the wounded in Army hospitals. Special aircraft refrigerators safeguard serums and plasma.



Aluminum
Aircraft Refrigerator



Peak welding efficiency is made possible by cooling of welding tips with water or brine held at the right temperature.



Spot Welder
Tip Cooling Unit



Tool life is increased and rejections are fewer when cutting oils used in high-speed machining are properly cooled.



Refrigerating Unit



The health of our armed forces is protected by dependable refrigeration in cantonments, huts, barracks, and on ships.



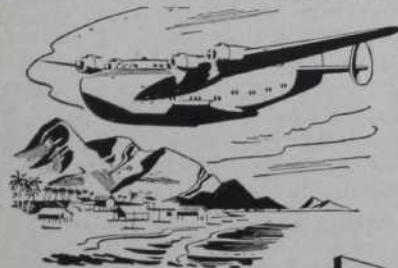
14 Cylinder
Refrigerating Compressor



Super accuracy in gauge rooms is possible when the air is clean, dehumidified, and maintained at a constant temperature.



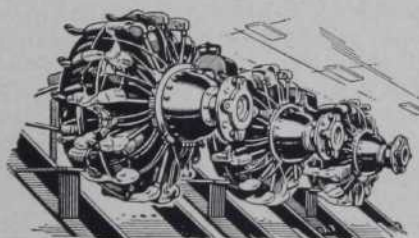
3 h.p. "Packaged"
Air Conditioner



Protection in the tropics against the ravages of humid atmosphere and vermin is necessary to preserve food and equipment.



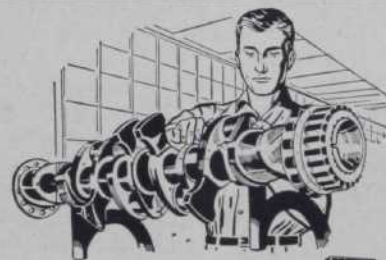
Portable Panel
Refrigeration Unit



Identical performance of aircraft engines is assured by operation tests with carburetor air kept at the same temperature.



14 Cylinder
Air Conditioning Compressor



Clean, dry atmosphere is vital for machining sensitive metal surfaces where a spot of rust would ruin high-precision products.



5 h.p. "Packaged"
Air Conditioner

★ CHRYSLER AIRTEMP AT WAR ★

From tiny, fractional horsepower to big 75 horsepower units, Chrysler Airtemp Radial Compressors are performing a major war job on both the production and battle fronts.

The science of air control is built around the compressor. Chrysler Airtemp's exclusive Variable Capacity Radial Compressor provides a new efficiency and accuracy in indoor climate regulation. The radial cylinders cut in or out automatically, one at a time, to meet varying load requirements. This flexibility eliminates the peaks and valleys resulting from abrupt starting and stopping of ordinary compressors... holds temperature and humidity at a constant level.

Years spent in building delicate mechanisms, have developed high-precision, versatile skills at Airtemp, now devoted to war production. Backed by Chrysler Corporation research and engineering, when peace comes, these skills will again create heating, cooling and refrigeration units for homes and commercial use that will set new, high standards of efficiency and performance.

The lessons learned during peace in free competitive enterprise—freedom of the individual to produce and compete—today bring strength to a nation at war.

War Products of Chrysler Corporation

Tanks • Tank Engines • Navy Anti-Aircraft Guns • Army Anti-Aircraft Guns • Bomber Fuselage Sections • Bomber Wings • Bomb Racks • Bomb Shackles • Fighter Landing Gears • Aluminum Alloy Forgings • Aluminum Alloy Castings • High-Powered Aircraft Engines • Cycleweld Cement • Wide Variety of Ammunition • Anti-Tank Vehicles • Command Reconnaissance Cars • Troop and Cargo Motor Transports • Ambulances • Weapons Carriers • Gyro-Compasses • Navy Pontoons • Marine Tractors • Harbor Tugs • Marine and Industrial Engines • Smoke Screen Generators • Air Raid Sirens and Fire Fighting Equipment • Powdered Metal Parts • Cantonment Furnaces • Tent Heaters • Refrigeration Compressors • Field Kitchens • and Other Important War Equipment

Tune in Major Bowes every Thursday, CBS, 9 P. M., E. W. T.

Chrysler Corporation

PLYMOUTH • DODGE • DE SOTO • CHRYSLER • AIRTEMP • AMPLEX

BACK THE ATTACK—BUY WAR BONDS

The Retail Shelves of '44

(Continued from page 27)

by the end of February. Since then they have remained well under 1942 levels.

The OPA tried to stem the tide by issuing its now amended M.P.R. No. 330 which froze retailers to the price ranges which they had carried in the base period. Larger stores, under the daily scrutiny of customers, competitors and officialdom, adhered to this order. It is probably safe to say that the average small shop was not even aware of the order, and to this day would be surprised to learn of it.

Frozen price lines however did not prevent the vanishing of lower-price merchandise from the markets. The flight is the natural result of higher manufacturing costs which force producers to concentrate on grades that yield reasonable margins.

Buyers are trading up

THE lack of lower-price goods compelled consumers to satisfy their needs with higher-price articles. This fact is further substantiated by the showings in 1943 of basement stores or divisions. While upstairs stores recorded sales gains month after month, the lower sales levels experienced successive decreases. A majority of volume merchandisers attribute the sales decline to a lack of promotional goods.

It has been stated frequently, too, that consumers are passing up lower price goods even where and when they are available.

So we have a condition where people are earning more money, paying higher prices and thereby swelling retail sales volume despite tighter supplies. They

are not consuming more goods than they did as far back as 1941.

We know they are not consuming more goods simply because less goods are being produced. It follows then that they are paying more money for what they receive.

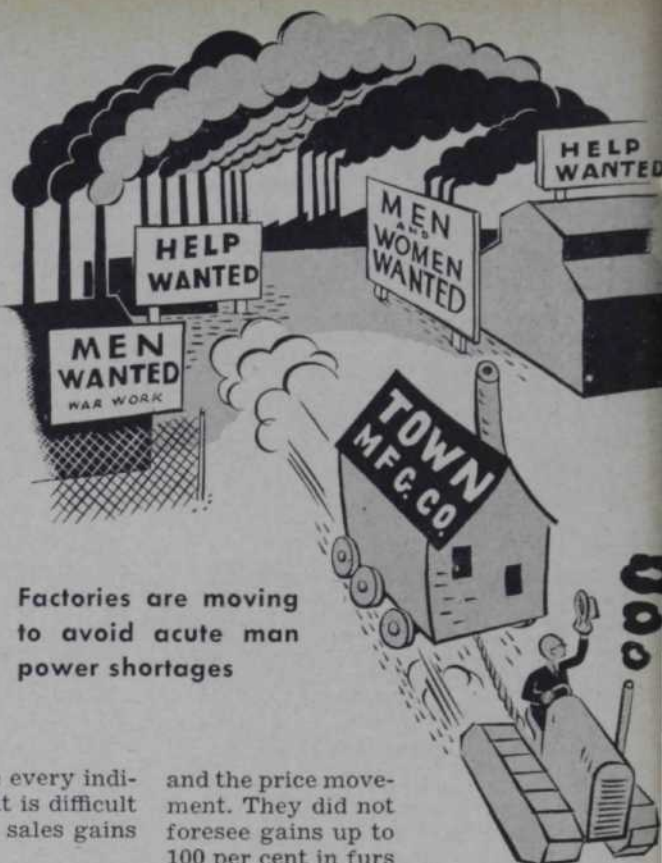
It is not pertinent to an estimate of what's ahead in 1944 to look into the soundness of the present economy of distribution, but it is germane to consider whether the outlook for the coming year warrants the belief that retail volume will continue to expand.

Because the conditions that produced 1943's increases still obtain, and give every indication of obtaining in 1944, it is difficult not to see at least moderate sales gains ahead.

Early in 1942, when industries producing consumers' hard goods were almost completely converted to wartime production, prophets of doom warned that retail sales in the United States would go into a nose dive.

They proved to be more astigmatic than prophetic. Many hard lines merchants, it is true, were forced out of business, but the volume diverted to soft lines more than compensated for the loss of hard goods trade.

The gloomy forecasters overlooked such things as the flexibility of our soft goods production, the extent of the gains that proved attainable in other goods,



and the price movement. They did not foresee gains up to 100 per cent in furs and jewelry, cosmetics and beauty treatments and preparations, art goods, antiques, eating and drinking establishments, and entertainment places. In short, they saw the end of trading in some things but failed to see the resultant expansion of trade in others.

More goods are promised

THE outlook for 1944 has been further improved by promise of increased civilian goods supplies.

Textile supplies should be more ample. WPB, for example, has lifted restrictions on the use of wool in the manufacture of clothing, draperies and upholstery fabrics. The use of synthetic rubber has been authorized in specified items, such as foundation garments and garters, and elastic fabrics should reappear on the market by early spring. Synthetics have greatly increased the supply of footwear that will be available in 1944.

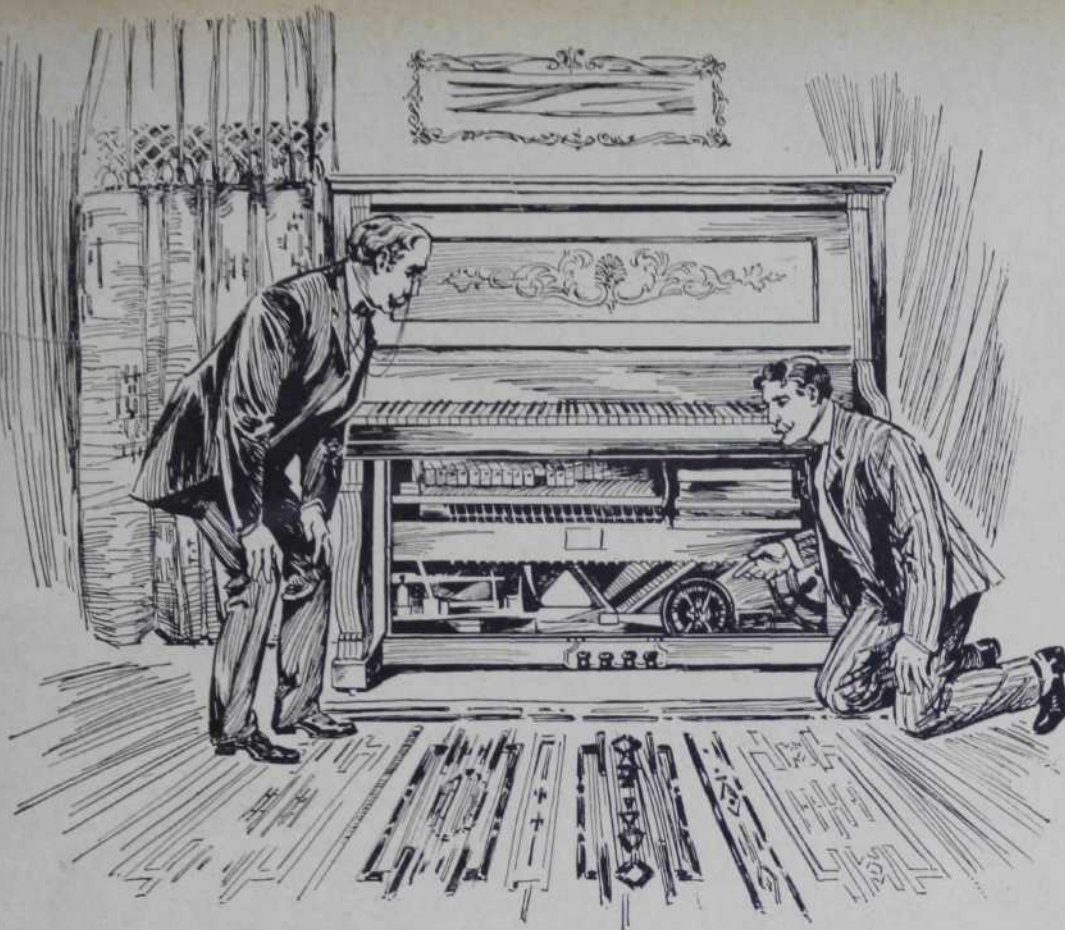
Man power shortages remain with us, but the ingenious American manufacturer is beginning to find a solution even to that problem. Factories are being moved from the WMC's Group I and Group II areas to regions where war production is negligible and man power is more abundant.

Does this mean that all retail trade centers will enjoy easier conditions of supply? The WPB intends that it shall. It is working diligently to see that everyone gets his full share of goods produced.

For the past year or more, cash sales have increased at the expense of installment and charge account sales. A basic reason for the tremendous growth of cash sales, apart from the obvious fact that a record amount of cash is in circulation, is the Federal Reserve



Consumers add to sales volume by switching to higher-priced goods



"Look, Harry, with this Emerson-Electric motor, the player piano will play itself!"

"You don't mean, George, that it will really play without pumping the foot pedals?"

"That's exactly what I mean, Harry—those motor people are finding new uses for electric motors every day. What will they think of next?"

A "Memorable Event" of 1904—Created by an Emerson-Electric Motor

IMAGINE everyone's surprise when, in 1904, a player piano actually "played itself"—an Emerson-Electric Motor had been installed!

This early innovation may seem trivial compared to the contribution of Emerson-Electric Motors in later years. But, it was this early pioneering that helped make present-day motor-driven appliances and equipment possible.

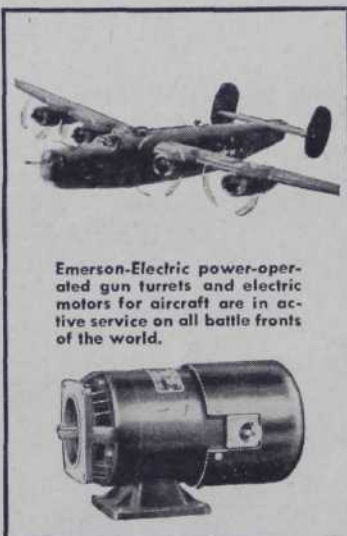
Think of living without electric motors to operate our washing machines, ironers, vacuum sweepers, refrigerators, fans, heating systems, and the numerous types of equipment in industry and commerce. The American way of life is powered with electric motors.

Now, Emerson-Electric is working full time for Victory. Wartime necessities are providing invaluable experience and creative research in a new and vastly enlarged field of manufacturing operations, particularly in light metals and plastics. "After Victory",

manufacturers of new and improved motor-driven appliances can turn with complete confidence to Emerson-Electric for motors that will do the job better and stay on the job longer—motors that will meet the challenge of a post-war world.



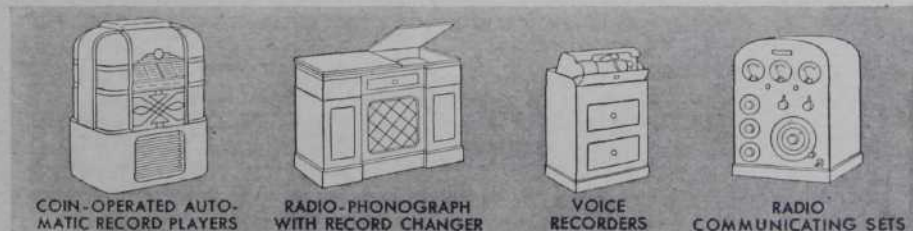
THE EMERSON ELECTRIC MFG. CO.
SAINT LOUIS
Branches: New York • Chicago
Detroit • Los Angeles • Davenport



Emerson-Electric power-operated gun turrets and electric motors for aircraft are in active service on all battle fronts of the world.



Musical, Sound and Radio Instruments Operated by Electric Motors



COIN-OPERATED AUTOMATIC RECORD PLAYERS

RADIO-PHONOGRAPH WITH RECORD CHANGER

VOICE RECORDERS

RADIO COMMUNICATING SETS

The War Bonds You Buy Today Will Provide the Electrical Appliances You'll Want After Victory

EMERSON ELECTRIC

MOTORS • FANS • APPLIANCES

NATION'S BUSINESS for January, 1944

Lucky for us
the boys back home
know their packaging

You said it! Not a
replacement part
damaged in this
whole shipment!



Let KIMPAK* Solve Your Post-War Packaging Problem



1. One of the basic applications of KIMPAK in Military Parts Packaging. A small machined metal part that must be protected against corrosion as well as damage in shipment. The part has first been coated with a rust-inhibitive oil or grease and then overwrapped in Grade A material. The function of the wrapper is primarily to retain the rust-inhibitive oil or grease on the metal part.



2. Next it is overwrapped in water-resistant KIMPAK. This is one standard type of KIMPAK. There are eleven other types to choose from. And look how easily and quickly it is applied. Note, too, how flexible it is, that there is no fuss—no muss—no waste. KIMPAK not only protects the metal part against shipping damage, but also protects the Grade A wrapper from rupture.



3. Inserted snugly in the corrugated carton, the grease-proof paper wrapping is free from direct contact with carton walls—safe from rubbing . . . safe from rupture. And the small metal part is now floated on a thick cushion of soft, resilient KIMPAK . . . protected against shipping damage.

For a Post-War Packaging Plan Call in the KIMPAK Man

A WARTIME DISCOVERY . . . that's what KIMPAK is! For it was the urgency of war that created hundreds of new uses for this protective packaging material. War plants found that the modern KIMPAK method of packaging fitted in perfectly with production line speed. Why? Because KIMPAK is so flexible, so compact, so utterly light in weight.

KIMPAK has gone to war, but it will be available aplenty when victory is won. So in making post-war plans, let our packaging engineers help you. It costs you nothing to learn how KIMPAK can save money in the shipping room. Telephone, write or wire for the KIMPAK representative today. Address: Kimberly-Clark Corporation, Neenah, Wisconsin.

*KIMPAK (trade-mark) means Kimberly-Clark Wadding

Kimpak
REG. U.S. PAT. OFF. & FOREIGN COUNTRIES
CREPED WADDING

A PRODUCT OF KIMBERLY-CLARK RESEARCH

Board's Regulation W, which tightened all credit lines and seriously discouraged credit buying. It has been reported and denied that the board considers its initial objectives have been overreached and some modification of Regulation W is likely. Any liberalizing of credit sale terms would logically bring additional retail volume.

From the evidence, it would seem that there is little reason to expect retail sales to decline in 1944. The latest figures show earnings, employment, man hours and pay rolls to be at high levels. Spending power, therefore, appears to be assured.

Civilian goods more plentiful

MILITARY demands on civilian goods industries appear to be waning. Raw materials, with a few notable exceptions, appear to be plentiful. Man power shortages are being met by maintaining the dollar volume of goods produced through concentration on higher price goods and the shifting of civilian goods industries to the non-critical areas.

What then are the negative factors to be weighed? The newly adopted excise taxes, it is true, may cause a temporary reaction by consumers. But merchants, experienced in trading in taxable articles, anticipate no serious or long-lived slow-down in buying as a result of the taxes.

Many merchants are frankly averse to stocking too heavily *ersatz* or successor material articles which the end of the war would make practically unsalable. But, they have a limited choice. They can either accept what the market affords or retire from business.

To provide for the depreciation in their inventories which peace will bring, merchants are setting aside surpluses to absorb the mark-downs they will be compelled to accept.

Man power shortages within retail establishments have severely handicapped them, but self-service has been widely introduced and generally proved successful.

The wants of 135,000,000 people in 1944 will be immensely greater than the volume of goods and services which the United States will produce and distribute. But, on the other hand, more of those people will have the means to satisfy their wants than ever before.

Everyone in 1944 will not be able to get what he or she wants but, if 1943 has taught us anything, he will take what he can get and gladly.

Higher prices will prevail but the consumer will be able to pay them, unless of course spending power is siphoned off to a far greater extent than it has been, and there is no reason to believe that it will be.

Remember too, there are more workers than ever, and it is highly probable that wage scales will climb still further. Workers will come into the market with earnings we would have regarded as fabulous two years ago. It is a safe conclusion that they will find abundant things to buy, and that their spending will send retail volume in 1944 above the mark set in 1943.



THE ALLEYS OF AMERICA

SUPPLY THE SCRAP FOR

ACCURATE ANALYSIS MICHIGAN SMELTING

NON-FERROUS ALLOY INGOT

MICHIGAN SMELTING

and Refining

Division of

BOHN ALUMINUM & BRASS CORPORATION

General Offices • Lafayette Building • Detroit, Michigan



**BUY
WAR
BONDS**



REFINERS OF NON-FERROUS SCRAP METALS FOR OVER 50 YEARS

Little Steel, What Next?

DESPITE widespread claims to the contrary, both hourly and weekly earnings of industrial workers have increased more rapidly than living costs.

This is shown by analysis of the Department of Labor's own monthly figures which have not, however, been published in such a way as to provide comparisons which present the full picture. The comparisons have now been worked out by the Department of Manufacture of the United States Chamber of Commerce, which explains that, while the "Little Steel" formula has restrained increases in straight-time wage rates, the effect of additional hours worked and of overtime has pushed both the hourly and weekly earnings ahead of the rise in living costs.

The "Little Steel" formula, in effect, provides that, if any group of workers averaged less than a 15 per cent increase in hourly wage rates from January 1, 1941, to May, 1942, "their established peacetime standards have been broken."

Actually, the U. S. Chamber points out, comparisons between hourly wage rates and the indexes of the cost of living are of slight significance; in practical effect the determining factor is what the worker takes home in his pay envelope. The analysis of official government figures shows that not only the weekly or "take home" earnings have increased far more than the cost of living index, but that hourly earnings likewise have stepped up at faster pace.

Here are the comparisons:

From January, 1941, the base month of the "Little Steel" formula, to September, 1943,

The cost of living index increased 23 per cent.
Weekly earnings increased 66 per cent.
Hourly earnings increased 45 per cent.

From September, 1942, the base at which prices and wages were ordered stabilized under the price control act,

The cost of living index increased five per cent.
Weekly earnings increased 17 per cent.
Hourly earnings increased 11 per cent.

From August, 1939, the last month before the European war broke out, to September, 1943,

The cost of living index increased 26 per cent.
Weekly earnings increased 87 per cent.
Hourly earnings increased 59 per cent.

The Government's index of living costs shows a rise of 22.8 per cent in the cost of all items covered in the period from January, 1941, to September, 1943.

In contrast to this rise of 22.8 per cent in living costs, the weekly earnings of iron and steel industry workers jumped 58 per cent and

Cost of Living in Large Cities

	Indexes (1935-39=100)	Percentage Increases, September, 1943, from		
	Sept. 15 1943	Sept. 1942	January 1941	August 1939
ALL ITEMS	123.9	5.2%	22.8%	25.7%
Food	137.4	8.5	40.5	47.0
Clothing	132.5	5.3	31.6	32.1
Rent	108.0	—	2.9	3.5
Fuel, Electricity and Ice	107.7	1.4	6.8	10.5
House Furnishings	126.3	2.2	26.2	25.5
Miscellaneous	117.0	5.0	14.8	16.5

Earnings and Hours of Work of Industrial Workers

	Earnings and Percentage Increases, (Hours Averages) September 1943, from			
	Sept. 1943	Sept. 1942	Jan. 1941	Aug. 1939
ALL MANUFACTURING				
Weekly Earnings	\$ 44.39	17%	66%	87%
Hourly Earnings	99.3¢	11	45	59
Hours Per Week	44.7	5	15	17
DURABLE GOODS				
Weekly Earnings	\$ 51.06	15	68	92
Hourly Earnings	109.8¢	10	47	60
Hours Per Week	46.5	4	14	20

their hourly earnings 38 per cent; in the automobile industry the figures were 54 and 31 per cent respectively; in non-durable goods 53 and 35, in food 40 and 26; in chemical and allied products 56 and 36; in petroleum and coal 61 and 30; in rubber products 56 and 36; electrical machinery 46 and 32; transportation equipment 66 and 51; non-ferrous metals and their products 60 and 42; lumber and timber basic products 65 and 47; furniture and finished lumber products 61 and 43; food 40 and 26; textile mill products and other fiber manufactures 54 and 48; tobacco manufactures 55 and 24; in miscellaneous industries 63 and 41.

In not a single industry listed in the study did both weekly and hourly earnings fail to keep well ahead, and in most cases far ahead, of the increase in living costs.



IF THE JAPS INVADED TOMORROW . .

Suppose you picked up your newspaper some morning and found that the Japs, in a lightning raid on the Pacific Coast, had fired a California city—and burned thousands of people alive! Suppose that you learned that among them were 2,200 children less than nine years old—wouldn't your blood boil? Wouldn't you be roused to a higher pitch of fighting spirit than you have ever been?

Yet—2,200 children under nine years of age are burned to death every year right here in the United States! But Carelessness, not the Japs, is the criminal.

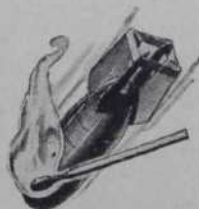
And—it's a crime you can help stop.

Yes, you can help save thousands, tens of thousands of other lives . . . and help prevent damage to war plants, damage seriously retarding our war effort with losses that mere dollars cannot replace today. And, to make it more tragic, fire losses in 1943 were about 18.3% above the preceding year.

That's why fire prevention, *always* important, is *extra* important now. That's why, too, cutting down fire losses is the concern not only of every manufacturer and home owner, but of every citizen. And there is this final reason to make fire prevention your concern—over a period of time the smaller the losses the less the property owner will pay for his insurance protection. So, now of all times—

Be *extra* careful about fires!

EITHER CAN DO



THE ENEMY'S WORK

☆ THE HOME ☆
Insurance Company
NEW YORK

FIRE ★ AUTOMOBILE ★ MARINE INSURANCE



the secret of getting FASTEST DELIVERY

DON'T wait for "routine" afternoon pickups, when shipping **AIR EXPRESS**. Get your shipments on the way as soon as they are ready—as early in the day as possible.

That's the secret of getting fastest delivery. Because you avoid possible delay, due to end-of-day congestion when Airline traffic is at its peak.

And to cut costs—**AIR EXPRESS** shipments should be packed compactly but securely, to obtain the best ratio of size to weight.



**A Money-Saving,
High-Speed Tool For
Every Business**

As a result of increased efficiency developed to meet wartime demands, rates have recently been reduced. Shippers nationwide are now saving an average of more than 10% on Air Express charges. And Air Express schedules are based on "hours", not days and weeks—with 3-mile-a-minute service direct to hundreds of U. S. cities and scores of foreign countries.

WRITE TODAY for "Vision Unlimited"—an informative booklet that will stimulate the thinking of every executive. Dept. PR-1, Railway Express Agency, 230 Park Avenue, New York 17, N. Y.

AIR EXPRESS

AIR EXPRESS
Gets there **FIRST**

Phone **RAILWAY EXPRESS AGENCY, AIR EXPRESS DIVISION**
Representing the **AIRLINES** of the United States

"You Can't Do It That Way"

(Continued from page 36)

excursions. He has made it a practice to get back home to sit around and gas with the fishermen and farmers of the First Congressional District of North Carolina and find out what they are thinking about. This is one of the first sections of the country to appear in history. The Lost Colony is one of the mysteries of colonial legend. The older families still speak with an English accent. The people of the First District have something of the Early American viewpoint.

Now and then Mr. Warren finds that the law has holes in it. This leaves him in the position of wishing to say "No" and not being able to do so. A jobholder was found to be telephoning his office in Tucson three times a day at government expense. This was deplorable but not illegal. No law could be found forbidding it. The jobholder's superior could have stopped it but he did not.

A contractor charged the Government with nylon stockings for his secretary. The charge might have been sustained in equity. Perhaps the girl had been running through an assembly yard on a dark night with a vital message and snagged her stockings. But the law does not hold with such goings-on and the contractor was asked to pay for the stockings. Mr. Warren has provided Senator Byrd's Committee on Nonessential Expenditures with a list of such legal but reprehensible failures to play fair with the Government.

Stepped on many toes

JOHN R. McCarl was the first Comptroller General. He was a furiously honest, impatient, and occasionally autocratic man who stepped on many important toes and worked himself to death. At the end of his term, the future of the General Accounting Office was doubtful. The executive branch of the Government wanted to get rid of it. Every executive head had at some time collided with the law and McCarl and had usually been worsted. Many congressmen had suffered similarly. President Roosevelt asked for the passage of his Reorganization Bill—which Mr. Warren had written—and left only a shadow of the General Accounting Office in it. One day Lindsay Warren, then on his eighth consecutive term in Congress, called on the President with a message from his fellow committeemen:

"If the GAO is cut out, the Reorganization Bill will never be made law."

The life of the GAO was saved but for a time it functioned in something of a vacuum. Acting Comptrollers General were reluctant to do anything constructive during this period of uncertainty. In November, 1940, Mr. Warren was named Comptroller General. The Senate immediately and unanimously confirmed him. The public reaction was

That *Postwar Vision* may be clearer

FLUORESCENT lighting will bring better vision to postwar office and home, just as it does to war plants now.

Under the pressure of war, quality research has been accelerated and extended to every phase of fluorescent lamp manufacture.

For example, it is true that the more immaculate the glass in a fluorescent lamp, the more light you get. Therefore, Sylvania has developed an improved lamp cleaning process.

Sylvania lamps now pass through two steaming hot baths of constantly changing water, in chemically treated ceramic vats. Thoroughly washed in the first, they are rinsed in bubbling, aerated water in the second. Any surviving dust is removed with power-driven, non-linting nylon brushes.

This meticulous care produces a superior inner surface for coating that distinguishes Sylvania Fluorescent Lamps.

The result is the best and most economical artificial light known — cool, glare-free fluorescent light.

Specify Sylvania Fluorescent Lamps for replacements and new installations.

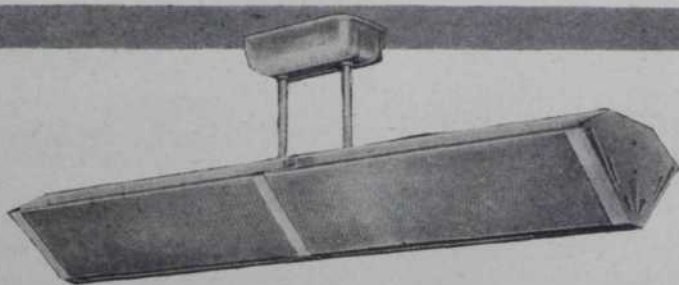
★ **SYLVANIA** ★

ELECTRIC PRODUCTS INC.

500 FIFTH AVENUE

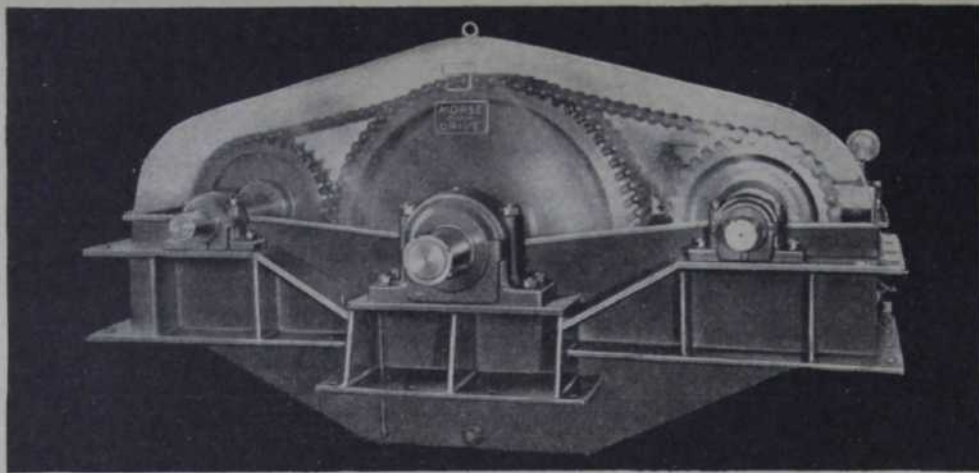
NEW YORK 18, N. Y.

INCANDESCENT LAMPS, FLUORESCENT LAMPS, FIX-
TURES AND ACCESSORIES, RADIO TUBES, CATHODE
RAY TUBES, OTHER ELECTRONIC DEVICES



NOW AVAILABLE FOR COMMERCIAL AREAS

A recent WPB order makes it possible to release this new Sylvania commercial fixture, which offers you outstanding flexibility of installation. Simple, smart, and modern in design, this new model is ideal for factory offices, drafting rooms, schools, and hospitals. Its semi-direct light distribution provides real visual comfort through shadowless and glare-free illumination. (Available on a priority of A-1-J or better.)



NOW-POWER PLANTS THAT GO PLACES ... WITH MORSE DUAL DRIVE UNITS

Literally, Morse Dual Engine Drives are going places, as well as serving as stationary power plants. Mounted in ships, on barges or rail cars, they harness the power of two or more diesel or gasoline engines to a single shaft at most efficient speed ratios. They make power available where and when needed—in isolated places or to replace power

failure. They provide standby service essential to continuous operation. Automatic control operates one or more engines as power demand requires. In industry, mines, oil fields and, soon, in your field—Morse Dual Engine Drive units, for mobile or stationary power plants, are going places. Investigate. Write Morse for engineering data.

SPROCKETS

CHAINS

FLEXIBLE COUPLINGS

CLUTCHES

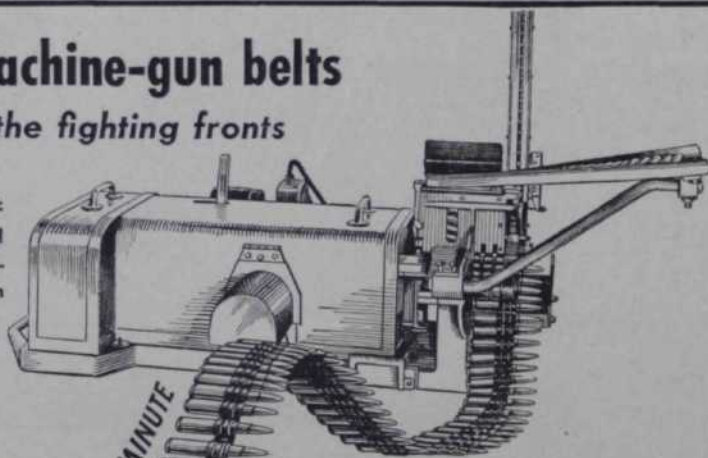
MORSE *Roller and Silent* CHAINS

MORSE CHAIN COMPANY • ITHACA, N. Y. • DETROIT, MICH. • A BORG-WARNER INDUSTRY

Makes machine-gun belts right on the fighting fronts

PRAISE FROM THE FRONT:

"A great labor-saver and a beautiful piece of machinery which the men in the field appreciate."



LINKS 150 CARTRIDGES PER MINUTE

This little machine has the big job of keeping our flyers and other combat forces supplied with metal belts of .50 cal. machine-gun cartridges... Individual links are fed into one magazine of the machine, cartridges into another, and the finished belts come out in a continuous stream. Operated by power or by hand, it can follow the fighting and be used in the most advanced positions.

We who have designed and built this, as well as many other types of armament machines, can tell you that our fighting men are being given every advantage which superior equipment can provide.

SPRINGFIELD 7, MASS. NEW YORK CHICAGO CLEVELAND LOS ANGELES TORONTO

PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

that a professional politician had been given the job. It was assumed that he would be a push-over. The public forgot that professional politicians get their training in a hard school. Mr. Warren has been a power in North Carolina politics since he was made secretary of his county committee two months after he graduated in law at the University of North Carolina in 1912. His friends say he could have been governor or senator if he had wished.

The GAO was in a deplorable condition. Mr. Warren began its reconstruction by announcing that the career men were to be retained. Promotions were made from the inside. None was dropped for political reasons. The only outsider brought in was Mr. Bagley.

Six congressmen were candidates for the post of Assistant Comptroller General. They were all good men and good friends of Warren's.

"I'm going to name Frank L. Yates," he said. "He has spent his whole working life in this office. He knows it from the inside out. I want him."

"I'm going to see the President about this," said one of the six. "No hard feelings, Lindsay."

"I'll see the President, too," said Mr. Warren. "I'm going to have Yates."

Patchwork in real estate

HE MIGHT have made a good story of that. But he didn't. He might have told—others did tell—of the time he looked into the Government's land situation to help the Committee on Unnecessary Expenditures. He found that the millions of acres the Government owns were controlled by 60 or so different departments and bureaus, and went to the President about it.

"They should all be under the control of the General Land Office," he said. "Our business should be handled in a businesslike way."

Nothing has been done about that.

If Mr. Warren ever loses his temper, which is debatable, he does so when a ranking bureaucrat calls. Almost without exception the bureaucrats want to bypass Congress. Mr. Warren refers them to the law:

"Maybe you're right. I am not called on to rule on that. But it isn't in the law and I won't pass it. Why don't you ask Congress to change the law?"

The bureaucrat has more than once whacked the desk:

"I'll not go to Congress. I'd go to any one else first. I'll not have anything to do with them."

"I can't do anything for you. There's the law."

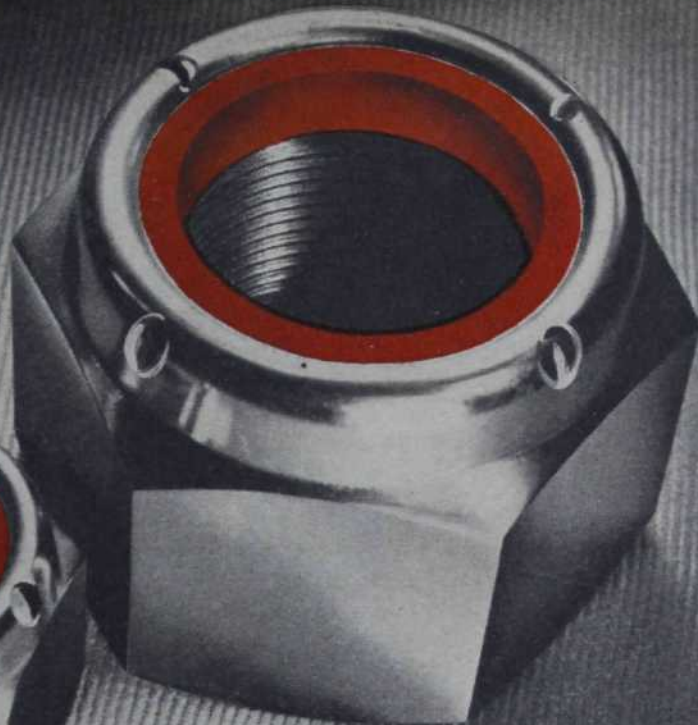
The GAO is a functioning organization now. A wall chart shows that 50 changes in procedure have been made in compliance with the suggestions made by the career men. They say he is easy to get along with. He hears both sides before he makes up his own mind. Then he is firm. If experience shows that his decision was wrong he has the courage to change it. He is friendly, but he pulls no punches. The War Department complained angrily that the Comptroller General had disallowed many

LOCKED ON
THE BOLT BY
THE ACTION OF
THE GRIPPING
RED COLLAR.



THE COLLAR
IS ELASTIC,
THE NUT CAN BE
USED TIME AND
TIME AGAIN.

MADE IN ALL SIZES AND TYPES—WITH
THREADS TO FIT ANY STANDARD
TYPES OF BOLTS.



WHY DO WE SAY "ELASTIC"?

This is an Elastic Stop Nut.

You know it by the red collar.

That collar is plastic—and elastic.

This is why the Elastic Stop Nut is different from other nuts.

When this nut is put on, the bolt threads press into the collar. It more than fits—it squeezes.

The nut can't wiggle, turn and loosen. It locks and holds tight—anywhere on the bolt.

Being elastic, the collar "comes back" after the bolt is removed. So Elastic Stop Nuts can be used over and over again and still lock.

Billions of Elastic Stop Nuts are being made today. And to our knowledge, not one in a million has ever failed.

After the war these self-locking nuts will make hundreds of things you buy safer, stronger, more durable. So watch for that red collar—it's the mark of these unusual nuts made by Esna.

ESNA

TRADE MARK OF
ELASTIC STOP NUT CORPORATION OF AMERICA

ELASTIC STOP NUTS

Lock fast to make things last

UNION, NEW JERSEY AND LINCOLN, NEBRASKA

WHERE ELASTIC STOP NUTS ARE GOING NOW



There are more Elastic Stop Nuts on America's planes, tanks and naval vessels than all other lock nuts combined. More than 12,000 of them go on the P-47 Thunderbolt. Two important applications show in the picture above.

1. Just four Elastic Stop Nuts fasten the fittings that hold each wing.
2. Just four bolts held secure with Elastic Stop Nuts fasten the throbbing 2000-hp. Pratt & Whitney engine onto the ship.



STILL

the best
type of fence
for

MAXIMUM PROTECTION

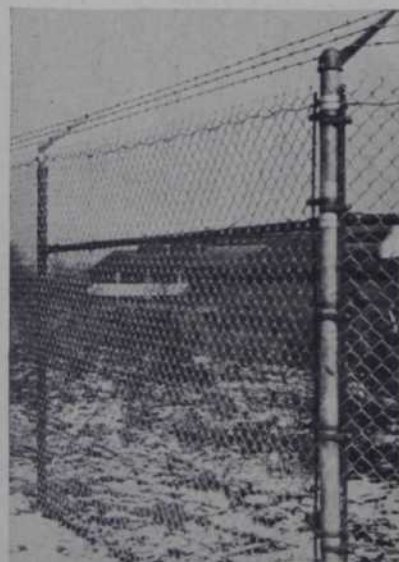
It's hard to climb, hard to cut, hard to break through. Even with government restrictions limiting gauge, weight, galvanizing and other factors . . . war-time *Pittsburgh Chain Link Fence* is still a good bet for maximum property protection. As a temporary substitute for the heavier, hot-dip galvanized, premium-quality product of normal times, this present fence offers as much resistance to trespass as possible.

If the nature of your business requires the security afforded by this war-time quality Chain Link, it is quite probable that you are eligible to get it.

Standard, heavy construction framework is available, and sales and erection service may be had anywhere.

PITTSBURGH STEEL CO.

1635 GRANT BUILDING
PITTSBURGH, PA.



Typical war-time installation using standard framework without top-rail.

Pittsburgh Chain Link Fence



of its expenditures. He responded by producing a documented list of 270 cases—"pulled at random from the files"—of payments he had refused to okay.

"I am growing more disillusioned every day," he said to the House Appropriations Committee.

One of the newspapermen in attendance wrote a note to another:

"You said this guy wouldn't lose his temper. What in thunder would he say if he once got mad?"

There will be from \$10,000,000,000 to \$15,000,000,000 of war contracts to be renegotiated. The GAO thinks most of these contracts are fair and that most American business men are honest. Under the pressure of time and circumstances mistakes may have been made, because the business men had to do a good deal of guessing. The GAO thinks that entirely satisfactory agreements can be reached. The War Department agrees wholly. But it thinks it should have the authority to make the agreements. The Accounting Office says the law does not warrant this.

"If the law is changed—O.K. All we do here is enforce the law."

Audit of war contracts

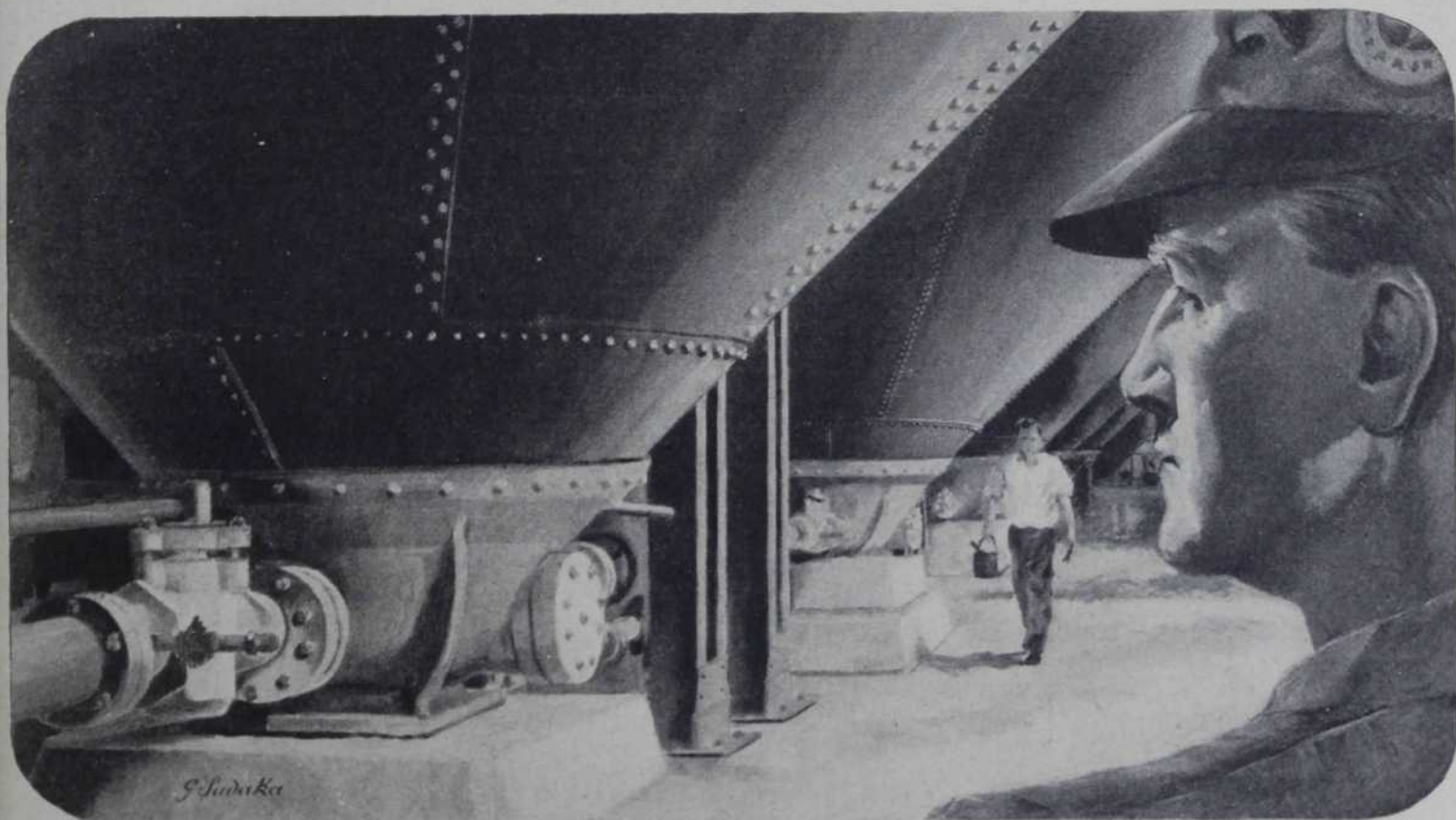
THE Accounting Office points out that it is the auditing division of the Government. It offers evidence to show that not every one of the Department's 6,000 contracting officers has the expert knowledge and experience necessary to pass on these almost innumerable cases. The GAO concedes that it is desirable from every point of view to pay the business men what is due them immediately. But it has represented to Congress that, if a payment of 75 per cent or even 90 per cent of the amount due on the basis of the contractor's own claims were made at once, the balance could safely be withheld for a final accounting.

Meanwhile the GAO has asked for \$38,000,000 for its running expenses in 1945. Although the war has taken 1,500 of its force—largely lawyers and accountants—the number of employees has increased from 2,000 a few years ago to 10,000. More business will be given it in the future in addition to that arising directly from the war contracts. At present the RFC does its own auditing. So do the Government's six other lending agencies. The Comptroller General and Jesse Jones are working out an agreement to present to Congress for legislation to correct this situation. Some of the 50-odd government corporations audit their own books, in harmony with the Supreme Court's decision in the Skinner and Eddy case, which was to the effect that in certain cases it is desirable that these corporations be permitted to escape the rigidity of government control. Not all of the government divisions submit to audit even though the law directs.

Mr. Warren has tradition and family history to stiffen his back, if stiffening were needed, in his respect for The Law. His home town is Washington, N. C., named for George Washington while the First President was still alive, and the

GLAMOUR

BEGINS IN A 30-FOOT CALDRON



IN CEASELESS RITUAL, America's women pursue that fresh, clear, youthful complexion.

Their use of soap . . . their accent on its place in the family scheme of things . . . has built a business that takes its place along with our steel and oil industries . . . our railroads.

A business so vast that plants boil soap in great caldrons—each holding a 300,000 pound batch . . . or nearly ten carloads.

But—one ounce or ten carloads—soap would not be possible without that familiar substance . . . salt!

Its white crystals are sodium chloride to the chemist. From them stem caustic soda, sodium silicate, sodium carbonate—all essential to soap making. And again, salt "grains" the soap in those huge

caldrons . . . separating it from the glycerine which is this industry's mighty contribution to the war effort.

But America's soap Titans comprise only a handful of the names that distinguish the list of clients served by International Salt Company.

There is hardly an industry that does not use salt. One reason so many leaders use International's Sterling Salt can be found in the superiority of its basic grades. Another is the unique salt processes developed exclusively by International. These processes improve production. They save man-hours and money.

International Salt Company, Inc., Scranton, Pa. and New York, N. Y. Sterling Salt for every use—in industry, agriculture, the home.

INSURANCE ALMANAC



On January 19, 1848, the discovery of gold in the tail-race of Sutter's sawmill touched off the famous California gold rush, and ushered in one of the wildest periods of speculation and spending that this country has ever experienced. Though prices in general soared sky-high during this period, fire insurance rates ran counter to the trend . . . held firm and low. Today, rates continue to run counter to the spiral of rising prices . . . are the lowest ever.

1944—JANUARY hath 31 days

"Fulfill your old resolutions before making new ones!"

ASTRONOMICAL CALCULATIONS EASTERN STANDARD TIME

JAN.	LATITUDE+30°		LATITUDE+35°	
	SUNRISE	SUNSET	SUNRISE	SUNSET
1	6:56	5:11	7:08	4:59
6	6:57	5:14	7:09	5:02
11	6:57	5:18	7:09	5:07
16	6:57	5:22	7:08	5:11
21	6:56	5:27	7:06	5:16
26	6:54	5:31	7:04	5:22
31	6:52	5:35	7:01	5:27

JAN.	LATITUDE+40°		LATITUDE+45°	
	SUNRISE	SUNSET	SUNRISE	SUNSET
1	7:22	4:45	7:39	4:28
6	7:22	4:49	7:38	4:33
11	7:22	4:54	7:37	4:38
16	7:20	4:59	7:35	4:44
21	7:18	5:05	7:32	4:51
26	7:15	5:11	7:28	4:58
31	7:11	5:16	7:23	5:05

JAN.	LATITUDE+30°		LATITUDE+40°	
	MOON-RISE	MOON-SET	MOON-RISE	MOON-SET
1	11:21	11:25	11:27	11:21
3	12:37	12:26	12:32	12:28
5	1:52	2:25	1:38	2:38
7	3:16	4:21	2:55	4:42
9	4:52	6:09	4:28	6:33
11	6:35	7:45	6:15	8:06
13	8:22	9:04	8:07	9:20
15	10:06	10:13	10:01	10:20
17	11:52	11:17	11:56	11:15
19	12:48	12:25	12:57	12:14
21	2:45	1:48	3:03	1:28
23	4:50	3:35	5:14	3:11
25	6:50	5:46	7:13	5:24
27	8:32	8:04	8:46	7:52
29	9:57	10:16	10:00	10:16
31	11:14	11:06

To obtain local times of sunrise and sunset for longitudes other than the standard time meridians (i.e., 75°, 90°, 105°, 120°, for Eastern, Central, Mountain, Pacific Standard Time), decrease time four minutes for each degree east of standard meridian, or increase time four minutes for each degree west of standard meridian.

- 1—Sa.—NEW YEAR'S DAY. 1822, first United States settlers arrived in Texas.
- 2—Su.— First Quarter, 3:04 P. M., E. S. T. 1905, Russia surrendered Port Arthur to Japan.
- 3—M.— 1920, violent earthquake in Central America. 1777, Battle of Princeton.
- 4—Tu.—1908, disastrous theatre fire Boyertown, Pa.—169 casualties.
- 5—W.—1608, Captain John Smith captured by Indians. 1905, American Red Cross chartered.
- 6—Th.—Epiphany. 1792, Franklin Engine Co. est.—later joined Fire Association.
- 7—Fr.—Start the New Year off right—have your Agent or Broker check up on the adequacy of your property insurance coverage immediately.
- 8—Sa.—1916, Gallipoli evacuated by British-French—campaign casualties, 119,729.
- 9—Su.—1892, fire destroyed large number of buildings at University of Missouri.
- 10—M.— Full Moon, 5:09 A. M., E. S. T. 1920, League of Nations organized.
- 11—Tu.—1757, Alexander Hamilton, 1st Sec. of U. S. Treasury, born.
- 12—W.—1888, blizzard in Northwest—235 frozen to death.
- 13—Th.—1942, War Production Board established. 1832, Horatio Alger born.
- 14—Fr.—1907, earthquake and fire destroyed greater part of Kingston, Jamaica.
- 15—Sa.—1929, Senate ratified Briand-Kellogg peace pact.
- 16—Su.—Are all the property improvements you made in 1943 covered by fire insurance? If not, get your Agent or Broker to extend your coverage at once.
- 17—M.—1706, birth of Benjamin Franklin—statesman and scientist—in Boston.
- 18—Tu.— Last Quarter, 10:32 A. M., E. S. T. 1802, Detroit, Michigan, incorporated.
- 19—W.—1907, 15,000 people rendered homeless by Ohio River floods.
- 20—Th.—1882, Panama Canal begun by French. 1752, Hibernia Engine Company, future affiliate of Fire Association, organized.
- 21—Fr.—1924, death of Nikolai Lenin, U. S. S. R. head.
- 22—Sa.—1901, England's Queen Victoria dead after 64-yr. reign. 1895, Nat. Assoc. of Mfrs. organized. 1932, Reconstruction Finance Corp. set up.
- 23—Su.—1890, Woman's Christian Temperance Union founded at Cleveland, Ohio.
- 24—M.—Despite the war, fire insurance rates are lower today than they have ever been.
- 25—Tu.— New Moon, 10:24 A. M., E. S. T.
- 26—W.—1837, Michigan admitted to the Union—the 26th State.
- 27—Th.—1880, patent for incandescent lamp issued to Thomas Alva Edison.
- 28—Fr.—1933, Adolph Hitler became Chancellor of the German Reich.
- 29—Sa.—1942, Benghazi recaptured from British by Rommel's Afrika Korps.
- 30—Su.—1649, England's King Charles I beheaded for treason.
- 31—M.—1917, Germany announced policy of unrestricted submarine warfare against U. S.

OBSERVATION for January:

In a period of rising prices, no man can be sure he's getting continuously adequate coverage unless he has his insurance policies checked frequently by an expert.

MORAL for January:

See your Agent or Broker today!

PROPERTY INSURANCE
Fire - Automobile - Marine

FIRE ASSOCIATION GROUP

Fire Association of Philadelphia
The Reliance Insurance Company
PHILADELPHIA



Lumbermen's Insurance Company
Philadelphia National Insurance Company
PENNSYLVANIA

SYMBOL OF SECURITY SINCE 1817

The wire in a tire...may help your business



PERHAPS you've never realized that wire is used in tires, but it is—as much as 16 pounds in some of the large truck tires. Without that wire, tires would not have the strength and rigidity in the bead—would stretch and come off the rim—and certainly could not take the one or more recap jobs which are helping to conserve rubber today.

Improving the quality and service of wire for tires, and developing time-saving, cost-reducing machinery for forming that wire into beads has been National-Standard's main job since the early days of the rubber industry. Working with rubber company engineers, we have helped them build better tires, at lower cost to you.

From this long experience, many new uses for wire in rubber have been worked out. Today, airplane de-icers, flat belts for conveyors, and V-belts for motor drives, tubular braiding for tubing and

hose—all now perform better when reinforced with National-Standard wire.

Our engineering and research staff are looking ahead—to the many other ways in which wire can serve all industry. Why not take advantage of their experience and skill to help explore your problems?



Divisions of National-Standard Company

NATIONAL-STANDARD
Niles, Mich.
TIRE WIRE, FABRICATED BRAIDS
AND TAPE

ATHENIA STEEL
Clifton, N. J.
FLAT, HIGH-CARBON STEEL

WAGNER LITHO MACHINERY
Hoboken, N. J.
LITHOGRAPHING AND SPECIAL
MACHINERY

WORCESTER WIRE WORKS
Worcester, Mass.
ROUND STEEL WIRE, SMALL SIZES



When our daring paratroopers leap upon the enemy from the air, action is sudden, fast, decisive.

Fast action, decisive action is just as vital on the home front. Here at Acme, we keep stepping on the gas for all-out production in the shortest possible time. Whether it's patterns, dies, heat-treated aluminum castings, or specialized tools needed by war plants, our watchword remains, "Do It Right—And Do It Fast."

The service of our engineering staff is available for specific recommendations to metal-working war plants. Inquiries receive prompt attention.

ACME PATTERN & TOOL COMPANY, Inc. • • • DAYTON, OHIO

Heat-Treated Aluminum Castings — Patterns — Tools — Tool Designing — Production Processing



BACK THE ATTACK
BUY
WAR BONDS

first town to be named Washington. Lindsay Warren's great grandfather on his mother's side was John Gray Blount—pronounced Blunt—and one of the largest land-owners in the country in Washington's time. A great grand uncle signed the Constitution and another uncle was an early governor of Pennsylvania. His father was one of the foremost lawyers of his day and the organizer and second president of the North Carolina Bar Association. A great-uncle was rated as one of the greatest judges in the young United States in 1776. Lindsay Warren had had two years' study in an academic course when his father died and the family money gave out and he came home to go to work. He saved enough to put himself through a three years' law course.

He has been in politics ever since: County attorney, state senator, state representative, member of the State Constitutional Commission, delegate to state and national Democratic conventions, active in Congress on behalf of tobacco, cotton, potato and peanut legislation and chairman of the committee on accounts. The only instruction he ever gave the men of the GAO, so far as this inquirer has been able to discover, was:

"Call 'em as you see 'em. There's The Law."

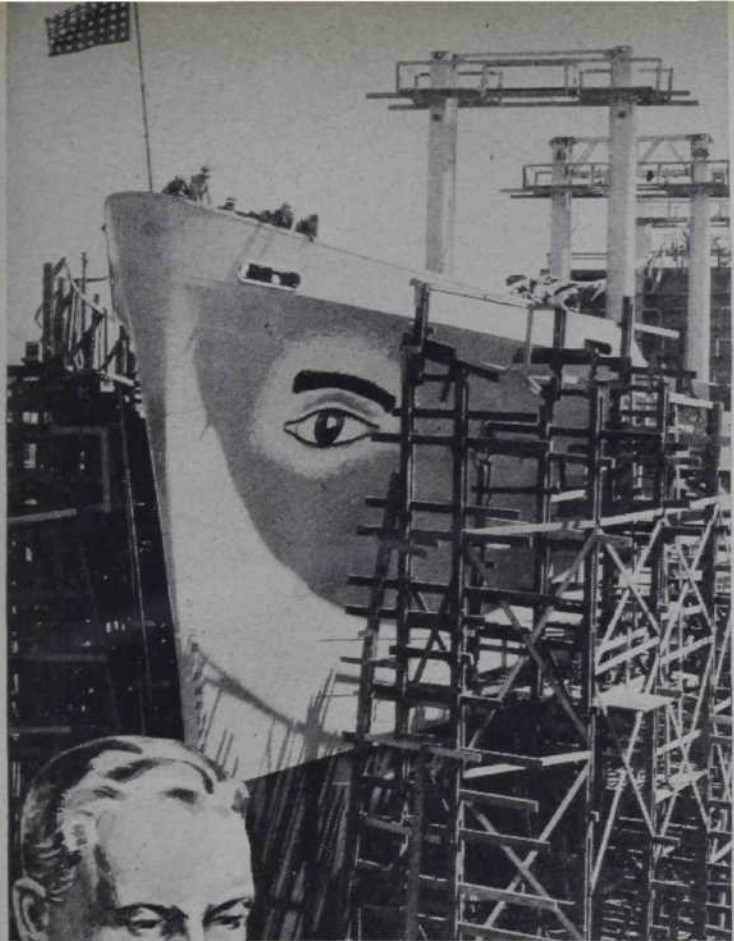


Canadian Worker

Canada has developed a number of entirely new industries since she entered the war, one of which is the government-owned Research Enterprises, Ltd., at Leaside, Ont., near Toronto.

Starting from scratch in 1940, this plant now occupies 55 acres, employs more than 7,000 men and women, makes optical glass, sighting instruments, precision tools and radio equipment.

The girl worker shown here is assembling the inner parts of a cathode tube for use in secret radio equipment.



12 SHIPYARDS ON THIS MAINLAND SIDE of San Francisco Bay build greater tonnage for the Maritime Commission and the Navy than any other section of the United States. Above is one ship of a triple launching at Moore Dry Dock Company, Oakland.



"It's the leading shipbuilding area of the country, Dick!"

"That's the say-so of the Maritime Commission. Their Pacific Coast headquarters are there in Oakland, you know. So are Kaiser's. Hundreds of other Metropolitan Oakland Area plants are working day and night on war jobs. The industrial expansion out there since Pearl Harbor is tremendous!"

"Why all the excitement, Harry?"

"Don't you get it, Dick? There's a new Pacific Coast! Millions of new customers for your goods. A new industrial empire with hundreds of thousands of skilled and semi-skilled workers. New sources of raw materials. Huge new power developments.

"And Metropolitan Oakland Area is right at the heart of it all, the most favorable location in the Eleven Western States for manufacturing and low-cost distribution.

"Don't hesitate a minute, Dick! Draw up your plans. Select your factory site. Be ready to let contracts the day the war stops."

Far-sighted manufacturers are doing just that. They will be way ahead of competitors in readiness to profit by the New West's manufacturing and marketing opportunities at the close of the war.

Write us the requirements of your West Coast operation and we will prepare a **CONFIDENTIAL SPECIAL SURVEY** directly applied to your problems. As a first step ask for **Facts and Figures** booklet.

3420

METROPOLITAN OAKLAND AREA

389 Chamber of Commerce Building, Oakland 12, California

The NATURAL Industrial Center of the NEW West

ALAMEDA • ALBANY • BERKELEY • EMERYVILLE • HAYWARD • LIVERMORE • OAKLAND • PIEDMONT • PLEASANTON • SAN LEANDRO • RURAL COMMUNITIES OF ALAMEDA COUNTY



MORE THAN 150 NATIONALLY KNOWN MANUFACTURERS' plants are in Metropolitan Oakland Area. Also several huge permanent establishments of the Army, Navy and other branches of the Government. Central location, exceptional transportation facilities, lower costs of distribution are some of the reasons.



CONCRETE AND STEEL DEEP WATER TERMINALS of the Port of Oakland and several privately owned terminals make our harbor facilities unexcelled on the Coast. With the return of peace this port again will offer low-cost water-borne transportation...intercoastal, coastal, and to the Orient, South America and Europe.



METROPOLITAN OAKLAND AREA
CALIFORNIA

Mainland gateway to the postwar markets of the Orient





Since Pearl Harbor this has happened 1,500,000 times

A Million Ways to Win a War

By DONN LAYNE

"I HAD a stupendous idea on my way down this morning," Sam Goldwyn once told a group of associates. "But," he added ruefully, "I didn't like it."

Such contradictions are, perhaps, permissible in the arts. In industry today, however, thousands of American workers are having ideas and liking them. They bring cash and the possibility of an honorable mention or a national citation.

Although suggestion systems are not new—some corporations have had them for 30 years or more—the widespread interest of industry as a whole did not develop until shortly before Pearl Harbor. Since then, the growth has been so rapid as to warrant the development of a means by which suggestion system procedure, standards, policies, and suggestions could be exchanged and made available to all.

Thus the National Association of

NAZI wise men were not smart enough to match the ideas of free men when suggestion systems turned them loose

Suggestion Systems—better known as NASS—came into being. It has functioned so successfully that, according to its Executive Secretary, Fred A. Denz, of United Air Lines, it now has a membership of more than 160 corporations, with almost 2,000,000 employees.

Within the past 24 months some 1,500,000 ideas have been submitted to more than 3,000 Suggestion and/or Labor-Management Committees whose duties are to pass upon their

acceptability. These committees have been and are still hip-deep in proposed ways to increase production, improve equipment, save labor and materials, speed up the flow of armament to the fronts, or boost morale. Suggestions already made have saved millions of

tons of war materials, millions of man-hours, and hundreds of millions of dollars (taxes to you and me). Several millions of dollars in awards have been paid to the contributors.

What brought all this on? How come this sudden flood of ideas? What kind of workers make 'em?

Answering the last question first, all kinds of workers make 'em but, oddly enough, the records show that thousands of workable ideas have originated with persons who had

What do you want to know about the coal industry?

ROY SPALTHOFF, New York Riveter, asks:

Why are there more strikes in coal mining than in other industries?

There are many people who think as you do, because anything affecting the coal industry is so important that it gets widespread publicity. But the fact is, our contract with the union comes up for discussion every two years, and there are rarely strikes at any other time. Naturally, we wish the record were better. We hope that all future strikes can be avoided. Up to this time, however, strikes in our industry have been spectacular rather than frequent.



ART ROLLINS, Carrizozo, N.M. Druggist, asks:

Why don't you give miners better working conditions?

We are working on this problem all the time. Straight through the lean years of the "thirties" we have been shifting the hard work to modern machines. Men formerly had to lie on the mine floor and gnaw at the coal with picks and shovels in doing what is called "undercutting." Today, 90% of the undercutting is done by mechanical gophers, driven by electricity. About 40% of all coal is now loaded into mine cars by mechanical loaders—more will be handled this way as machines become available. These machines also, by saving costs, have helped us to pay steadily better wages. As an official report of the National War Labor Board shows, the wages of coal miners today are twice what they were in 1933.

ELAINE KOTHE, Detroit Secretary, asks:

Why do miners have to buy in company stores?

Many people have this impression, but the truth is, miners are free to buy where they please. Company stores were originally started for the convenience of miners, before the days of the automobile, and before chain stores had grown to their present size. There are some mining towns today which are served only by company stores. This is likely to be true in towns where mines will soon be worked out, and outsiders do not wish to start in business. But in most mining towns there are many stores, and chains and independents are welcome. In many cases miners will tell you that company stores are the best in town.

It must be remembered that the bituminous mining industry is made up of many separate companies operating in many towns under many conditions. In all honesty, some company stores are better than others just as some independent stores are better than others.

But, coming back to the original question, there are no rules requiring miners to buy at company stores, and there haven't been any such rules for many years.



BACK THE ATTACK—WITH WAR BONDS



Bituminous coal is by far America's most important fuel. For that reason we feel that the public has a right to know what kind of industry is providing this coal today.

Our business is an open book. Anyone who takes the trouble can dig out any fact he wants to know about it.

But we'd like to save you that trouble. So we have invited thousands of people to send us their questions—and in a series of advertisements such as this we'll try to answer the ones which seem to have widest interest.

NATION'S BUSINESS for January, 1944

Our story is a big one, and we cannot hope to tell it all at one time.

But we believe the more you know about it, the more you will realize that we try to live up to our duties to our country, our customers, and the people who work for us.

BITUMINOUS COAL *Institute*

60 East 42nd Street

New York 17, N.Y.

never—until two years ago—seen a shipyard, a plane factory or a munitions plant.

It was a former housewife, Mrs. Maude Knight, who invented a burning table that increased production at the Richmond, Calif., Shipyard No. 1. She received an Honorable Mention and a cash prize.

A nutpick on radio crystals

AT R.C.A.'s Victor Division, Miss Gloria Pallato, still in her teens, increased production in the crystal manufacturing department where rejections had been high because the sensitive crystal lost its usefulness if touched by hand. Remembering that she had used a nutpick as a lever in forcing rubber rings on to preserve jars at home, Miss Pallato adapted the same technique to her work of placing a rectangular rubber gasket around a tiny crystal. Rejections have dropped to zero.

At the Curtiss-Wright plant in Columbus, 20-year-old Richard Alan Herb won Honorable Mention for his novel method of eliminating air bub-

blers, clerks, salesmen, chorus girls, janitors, debutantes—and WPA workers. Some of the best were turned in by a recently discharged one-armed soldier and a blind ex-piano tuner.

Ingenuity of these novices may affect postwar personnel practices, at least in one New England factory.

"Never again will I put so much emphasis upon 'training and experience' when hiring new employees," this manufacturer says. "Mental alertness is what I shall look for from now on. Many of our best production ideas and improvements have come from students, outside workers, business men and lawyers who work on our split-shifts. One former beer truck driver has given us a half dozen splendid suggestions."

Even the armed services and various branches of the Government have appealed to their personnel for ideas in an attempt to cut red tape, conserve materials and improve equipment. The Army Ordnance Department, during a 14-month period, accepted 1,600 valuable ideas from a total of 3,600 suggestions; and the Office of Price Administration re-

How much these suggestions have contributed to the success of the war effort cannot even be estimated, of course, but, in the opinion of one West Coast shipbuilder, "If it were not for the labor and ideas of our inexperienced and untrained workers the war production effort would be far from the success that it is."

In that industry, the number of foremen and supervisors is now two and one-half times as great as the total number of all employees before the war. There, and in other industries where rapid expansion took place or where rapid conversion to unfamiliar products was essential, the need for short-cuts, savings and improvements was obvious. It is in such industries that most of the suggestions have been made and adopted.

In the more stabilized industries, where through the years both management and the workers have had ample opportunity to examine almost all the possibilities, the workers find it less easy to think up ideas that would be of much value.

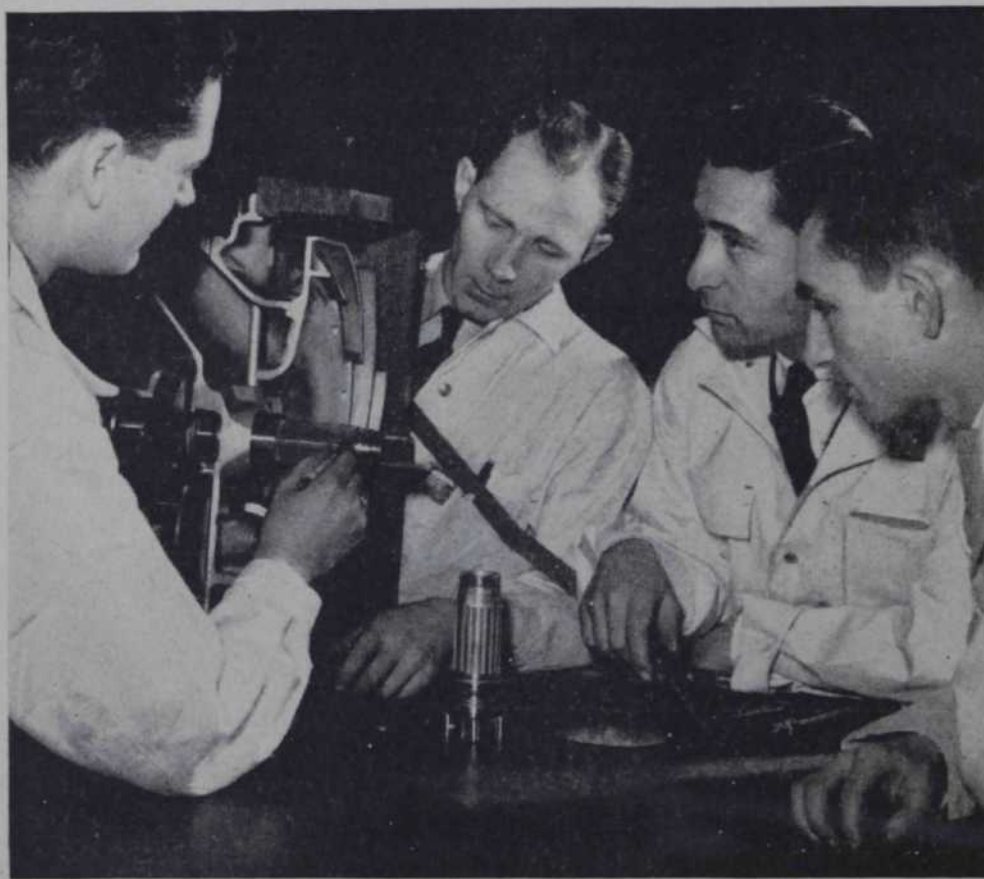
Awards are cash and pride

THOSE in position to know claim that the big incentive behind the current flow of ideas is a mixture of patriotism, the desire to see one's own idea being used, and the pride that comes with recognition of creative ability. Of course, the cash awards are no hindrance but, if money were the only stimulus, many in management believe that the number of ideas submitted would fall off sharply.

Many plants now give War Bonds to workers whose ideas have been accepted, the size depending upon the value of the suggestion. Others give a certain percentage—generally ten per cent—of the amount the company expects to save through the use of the idea. One large plant gives the worker all of the first year's savings. The top official of one large corporation, whose award policy is 25 per cent of the expected first year's savings, said they intended to increase the percentage after the war—or as soon as they finish their war contracts.

Some in top management also believe that, when the war ends, the number of ideas will drop, that many plant operators will lose interest. Others, however, insist that the volume will remain high. They claim that postwar industry, with its new products, new materials, new markets and heavy civilian demands, will need workers' ideas just as much as industry does now.

Practically everyone acquainted with the remunerative-suggestion-system idea agrees that it has met with many vicissitudes since the National

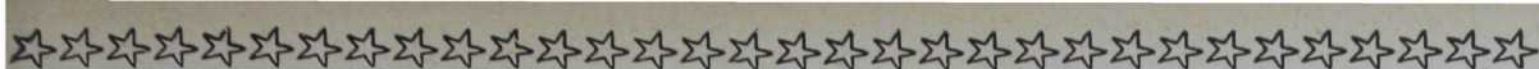


Technicians examine every suggestion. If it works, the employee is paid. If it doesn't, he gets a careful explanation as to why not

bles in airplane fabric with a hypodermic needle. The company thinks his suggestion "bears the touch of genius" and his fellow workers are now calling him "Doctor."

Other acceptable suggestions have come from former truck drivers, far-

ceived better than 1,000 ideas from its employees in six months. Congress has authorized both the Army and the Navy to give cash awards for good suggestions. Several other federal departments are asking Congressional permission to do the same.



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Common Stock Dividend No. 112

A cash dividend declared by the Board of Directors on December 15, 1943, for the fourth quarter of the year 1943, equal to 2% of its par value, will be paid upon the Common Capital Stock of this Company by check on January 15, 1944, to shareholders of record at the close of business on December 30, 1943.

The Transfer Books will not be closed.

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Cash Register Company first installed it in 1894. Through the years, the idea has waxed hot and cold. In many cases management has been skeptical. Some plant operators, having installed a box with a sign on it and a slit in the cover, waited in vain for ideas and then decided that suggestion systems didn't work. Meanwhile, many of the larger corporations such as E. I. du Pont de Nemours & Company, Illinois Central Railroad, Eastman Kodak, General Electric, Johnson & Johnson, Nordberg Manufacturing Company, Stromberg-Carlson Company, Worth Steel Company—to mention a few—were operating suggestion systems which for years proved advantageous to both the company and the employee.

They had learned to overcome the stumbling blocks which are chiefly three:

1. The Supervisors and Foremen.

This group, generally speaking, has always looked upon any type of suggestion system as the devil's own concoction. They felt that, if a good suggestion came from a worker, their own boss would be likely to say, "Why didn't you think of that? What kind of a foreman are you?" If a worker submitted two or three acceptable ideas, they thought, "That guy's liable to move right in on my job!" Again some felt that the suggestion system was simply a "pap and fish" idea to gain the good will of the workers. Hence they took no interest and gave no aid to its successful operation.

Enlightened management has, of course, eliminated such handicaps by letting everyone on the pay roll know that suggestions are wanted, and that no one shall suffer penalties of any kind because of an idea or the lack of one. Moreover, foremen and supervisors in many plants are now given credit for the number of ideas coming from workers under their particular supervision.

2. The Workers.

Many individuals have long felt that to submit a good idea simply resulted in more work, less pay, and a lay-off—if not for him, then for some fellow-worker. Some workers made suggestions only to find that they had gained nothing but the antagonism of their immediate supervisors—or that someone else had been given the credit. Others submitted ideas and heard no more about them.

Modern management has learned to gain the workers' confidence and maintain their interest in the suggestion system by placing both worker and top-management representatives on the suggestion committee; by using numbered suggestion forms with detachable stubs, so that the timid can make

anonymous proposals; by sending out with each rejection letter a detailed explanation as to why the suggestion could not be used; by standardizing award methods; and by promising every precaution that a suggestion will result in no loss of either employment or hourly earnings for the workers involved.

3. Management.

With this group rests the responsibility for either the success or failure of the suggestion system. Back in the early—but let Elbert E. Husted, President of the Tite Flex Metal Hose Company, state the case: "Once increased production could be obtained by a simple expedient. The plant management merely put on the pressure. Employees had to produce more or lose their jobs. None of us would like to return to those days. Industry today is a working partnership of management and labor. Management does all the planning, assumes the economic risk, and directs all of the numerous departments of a modern industrial enterprise. Labor, on the other hand, is the force that converts the plans of management into a stream of finished products. It is recognized as a vital partner in the battle of production. . . ."

In other words, the greater part of management has been coming of age during the past decade or two; and in having had experience with (or at least a chance to observe) the successful operation of suggestion systems it has learned many ways in which to accomplish the task. Procedures can be flexible. Awards can vary from time to time and from plant to plant. Methods of stimulating suggestions through posters, asking questions concerning tools, jigs, materials, job operations, etc., can be of infinite variety. Only one basic principle remains unchanged and inviolate: Ideas are not forthcoming from disinterested workers.



Scraping the Bottom of the Bin

(Continued from page 26)

minor physical incapacities, no organized effort has been launched to train and direct these men to the home-front food command.

On thousands of farms, too, the main work has been carried on during the last two years by older men, the women-folk, children, and occasional weekend workers from nearby towns. Now the older men are slowing down under the unaccustomed burden. To reduce their labors, they sell a milk cow, curtail livestock herds, feed fewer chickens, abandon a field here or garden patch there. This many-sided seepage of basic farm production is not reflected in the Government's official reports on intentions to plant, as published by the Department of Agriculture. Yet the combined affect of such curtailments doubtless will be considerable when the harvest is measured next fall.

Farm machinery

ALTHOUGH more metals have been allocated for basic farm equipment in 1944, the red-tape and formalities surrounding actual distribution of new machinery to farmers is so involved that many rural folk give up in despair after their preliminary inquiries.

All machinery applications must be approved by the county agent. Often there is a disposition to force community machinery pools, regardless of the fact that perhaps only one particular farmer is able and disposed to buy a new piece of equipment. By the time such administrative wrinkles are ironed out a planting period may have passed. Although the WPB controls were established only as a means of limiting consumption of metals, the Department of Agriculture has seized on those regulations as a means of enforcing a modified form of collective farming in many counties.

There are several cases of record in the Middle West where farmers withdrew their machinery applications rather than submit to the compulsory pooling arrangements demanded by the county agent as a condition of his approval of the WPB form. Some farmers are curiously stiff-necked on this question of mandatory collectivization, although the old American tradition of lending tools and equipment up and down the road on a neighborly basis apparently is as deep-rooted as ever. Many a farmer will work his equipment to collapse for his neighborhood, yet would not be party to a compulsory pool.

The WPB has set relatively high quotas for heavy farm machines, such as tractors, combines and hay bailers. But first call on these items is from farming projects operated by the federal and state Governments, as prison farms,

Japanese internment camps, and experimental farms. Even when civilian quotas are set at 100 per cent of 1940 production, only about three-fourths of that production actually is available for civilian requisition. Only a few machines are allocated on the 100 per cent basis, as measured by 1940 production. Corn-pickers are budgeted at 50 per cent, potato-diggers and milking machines 40 per cent, corn-planters 30 per cent, grain drills 20 per cent, fruit sprayers 15 per cent, and potato-planters nine per cent.

While these starvation machinery quotas prevail, WPB acknowledges that it has a surplus of certain types of basic metals. They cannot be diverted at once to civilian use, however, because the necessary manufacturing manpower is not available.

Any farming establishment, of course, may squeak through for a year without new equipment or basic replacement parts. But the second year will bring a degree of curtailed operations. The third year—1944—inevitably will bring on



"She gets paid Time 'n' a Half"

something approaching a general curtailment of production.

Food processing equipment

ABOUT the same situation prevails in food processing machinery. On November 29, WPB reduced this equipment from priority rating AA-3 to AA-5, and cut back the production base from 100 per cent of 1942 output to 50 per cent of the annual average for the years 1939-41 (L-292). This means less machinery for every processor.

The record shows, for example, that in 1943 some 60,000,000 bushels of soy beans were allowed to rot in middle-

western fields because the processing mills could not get equipment to expand their plants in line with the planned increase in farm production.

A similar situation prevailed in sugar refining in both 1942 and 1943. An official report from the Department of Agriculture shows that federal policies enforced a curtailment of more than 1,000,000 tons of sugar in Cuba and the United States during the 1943 crop year, principally because processing plants could not be expanded to handle an increased agricultural production.

In Florida some increase in sugar refining capacity was authorized, but was installed too late to handle the new crop in season.

It may appear incredible that the federal Government, facing an acute sugar shortage after having lost possession of 1,000,000 tons annually in the Philippines, would set about to reduce production in its three remaining sugar supply areas.

As it turned out when the official statistics became available, the million tons lost in the Philippines were made doubly heavy by the additional curtailment of another million tons in the United States, Cuba, and Puerto Rico. Such is the record of our recent sugar program.

Failure to provide processing machinery for expanded farm production quotas in other items also has resulted in shocking marketing dislocations in both animal feeds and meats. When the shortage of feed-stuffs began to pinch farmers seriously in the late summer of 1943, they reduced their herds, shipping thousands of cattle and hogs to market two to six months ahead of normal schedules. This rush of distress marketing overwhelmed slaughtering facilities, and, as regards hogs, broke the government support price at Chicago. This forced federal emergency buying to sustain the farm price on a rationed food item.

As regards beef, this early shipment to market meant that every head was short 300 to 500 pounds of its normal meat weight. Thus, the temporary easing of the meat picture in December was principally to relieve government of its own great embarrassment.

The temporary "surplus" was largely mythical. It represented simply some of the February, March and April meat quotas coming to market in October, November and December—because no provision had been made for production of feedstuffs adequate to maintain the planned increase in farm herds.

Price maladjustments

INEQUITABLE retail ceiling prices on finished food products inhibit maximum distribution in many food lines. Farm prices still are advancing from month to month, but city food ceilings remain relatively rigid, constantly pinching out the incentive to increased volume both at the processing plant and throughout the distribution machine. Current flour ceil-

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DON'T be too quick to cast aspersions on the motives of Labor. America's hope lies in better living standards for ALL of her people—better working conditions—better food and more of it. The same holds true for the peoples of the entire world.

Think well of ALL workers. They deserve your loyalty and trust. This is the true precept of Christianity.

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ings, for example, were set when wheat was selling at \$1.15 a bushel, Chicago. Then wheat went up to \$1.70, Chicago. By October, 1943, the flour milling industry was frozen. This dilemma was resolved by announcement of the flour subsidy late in November.

Figures tracing this pattern of crippled processing and distribution could be cited for some 50 items in America's market basket.

Too many cooks

DIVIDED authority over food programs, between the WFA, OPA, Commodity Credit Corporation, Lend-Lease, United Nations' Relief and Rehabilitation, DPC, RFC, and WPB, apparently has created many confusions and uncertainties for both farmers and business men trying to plan their 1944 programs in production and distribution of foods.

This division of authority reaches to every aspect of food controls—production, processing, distribution, pricing, subsidies, military allocations, packaging materials.

Vigorous action to integrate the administration of the food program is perhaps the first requirement of our present situation. Failure to integrate federal food management surely will lead to widespread suffering in 1944.

Our national food program has been reorganized three times since 1941. Today it is still a circus in many rings. All the little sideshows need to be put under one tent, and divorced as far as possible from the experimental socialism which dominates the Department of Agriculture, the War Food Administration and certain lingering elements in OPA.

Food waste

EXCESSIVE handling losses, storage deterioration, and unmanageable stockpiles also have characterized our wartime food program. Waste and extravagance have been part and parcel of lend-lease operations in foodstuffs. Congress has investigated many reports of food spoiling in government hands, including 3,000 carloads of potatoes, 30 carloads of evaporated milk, 250,000,000 bushels of wheat in 1941 and 1942.

In addition, about 300,000,000 bushels of wheat have been consumed this year in manufacture of industrial alcohol for explosives, plus some 625,000 tons of Cuban sugar.

In October, 1943, when butter was unobtainable in several large cities and available only in quarter-pound lots generally, an official report showed 221,000,000 pounds of butter impounded in cold storage by the federal Government—about 6.7 pounds for each of the 33,000,000 families in the United States. Some of this butter had been in storage so long that it was unfit for human consumption.

In November, 1943, the Commodity Credit Corporation submitted to the House of Representatives an itemized statement covering "non-recoverable losses" in government-owned food spoilage. This table included 2,739,000 pounds

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of dried beans and peas which had become mouldy and weevil infested; 295,000 pounds of wheat cereal; 234,620 pounds of strawberry preserves—mouldy; 113,088 pounds of canned salmon—rusty cans; 121,600 pounds of potatoes—old stock; 138,750 pounds of fresh onions—decayed; 69,804 pounds of canned tomatoes—spoiled; 74,064 pounds of canned peaches—rusty cans.

Another list carried items spoiled but partially salvageable. This list included 1,939,000 pounds of rolled oats—damaged by rodents; 47,420 pounds of canned chicken; 240,000 pounds of salmon; 102,700 pounds of mouldy beans.

At Zanesville, Ohio, 30 carloads of evaporated milk were in hand at least three months on government account when the cans began to explode.

"Examination disclosed that many of them have bulged due to gas formed inside," said a local report reproduced in the *Congressional Record* for November 19, 1943 (page A-5339).

On Capitol Hill, advocates of a centralized Food Administration contend that such an organization could be made to pay its own way exclusively on food saved from spoilage at home and abroad, plus elimination of extravagance in the diversion of basic food items to industrial uses, for which by-products would serve as well.

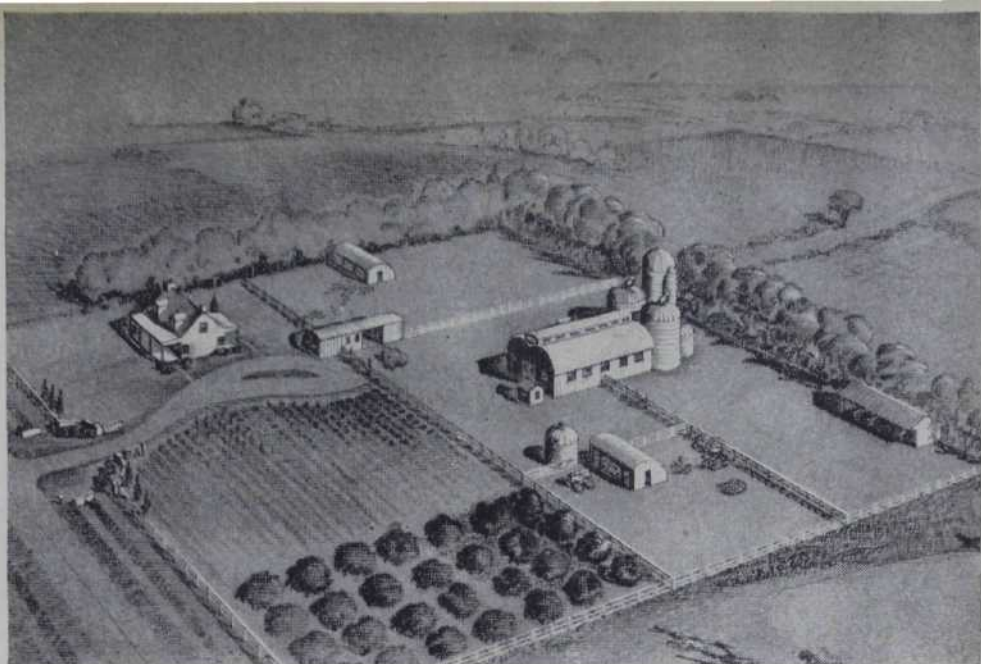
Withdrawal of farm lands

THE Byrd Committee of the Senate reported on November 18, 1943, that the Army, since July 1, 1938, had acquired title to, or instituted title proceedings against, land aggregating 19,683,101 acres for diversion to camps, training centers and other military establishments. "This encompasses an area larger than New Hampshire, Connecticut, Massachusetts, Rhode Island and New Jersey, combined," the committee reported.

Not all of this land was in agricultural production, but in many instances, whole blocks of fertile farms were swept away for military use. The Navy likewise has acquired title to 1,408,534 acres, and rented 3,073,969 additional acres. These military withdrawals of 24,000,000 acres represent, on the basis of average yields, approximately 337,000,000 bushels of wheat, or about 45.6 per cent of our United States average annual production of all wheat for the decade 1932-41.

Federal profligacy in food management was tolerated in the days when government experiments merely were consuming the tremendous reserves built up by the American enterprise system over the years. But now the nation is scraping the bottom of the food barrel.

Through UNRRA, vast new lend-lease outlets for American food in the post-war world are being organized. Famished peoples by the hundred-millions look to America for assistance along the road back to freedom and security. Under today's conditions, waste of food is a crime against humanity and sabotage of both the war and the peace.



Farm of The Future For Future Farmers of America

Measured by conceptions which most city folks have of farmers and their farms, the farmstead pictured above would be rated quite visionary.

Actually, this is an architectural drawing of one of many farmstead layouts planned by Butler Agricultural Engineers to meet the demands of a new generation of farmers. Hundreds of thousands of them are coming out of the 4-H Clubs and vocational high schools trained in higher efficiency farm operations and imbued with the desire for the conveniences of better living.

Each year for sixteen years, the Future Farmers of America have selected from their membership, now numbering nearly a quarter of a million, the Star Farmer of America.

This year the award went to 19-year-old Wayne Booth of Cordell, Okla.

Something of the progress this virile new generation of farmers is making can be glimpsed from a brief summary of Wayne Booth's accomplishments. On his own he operates a 320-acre farm, owns his own tractor and all other equipment needed to operate his acreage efficiently.

His livestock consists of 13 head of registered shorthorn cattle, 100 breeding sheep, and 50 hogs. These represent thousands of coveted ration points—points which would not have half their present values were it not for the increasing productivity of farms which is being brought about by better equipment, methods, and management.



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We are planning to add 5 or 6 products to our post-war line. If you have a product or idea which you believe would fit in with our activities, write Mr. W. E. Ditmars, our President, in complete detail. We will consider any practical arrangement.



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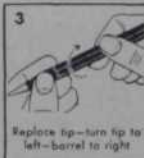
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We will be glad to work with you NOW in the development of your post-war products.



Nest Egg...

Faced with a wartime dilemma this firm finds that friends pay dividends

D. C. PROCTER, president of the Jefferson Drug Company, Beaumont, Texas, found himself in a quandary when one of his experienced salesmen was inducted into the armed services. This salesman had been covering the East Texas territory for years and was familiar with both the trade and the products manufactured by the firm.

Confronted with the manpower shortage, as well as with gasoline and tire rationing, Mr. Procter conceived the idea of not replacing his salesman.

Unknown to the salesman, Jim, Mr. Procter wrote a letter to each of the customers in his old territory, explaining that Jim had been called into the Army; and explained that the company was going to hold Jim's job for him until he returned. Urging the customers to send in their orders by mail, the company promised to set aside a commission of two per cent on all orders coming out of the territory and to use the money to buy war bonds in Jim's name.

Sales for a drafted salesman

THE appeal of building up a "nest egg" for Jim while he was away serving his country met with immediate and wholehearted response. Average sales throughout the territory never dropped and, because of increased business activity in some cities, there was a total gain in sales over the period when Jim was making the territory regularly.

The plan is a decided success. The company has received more business and much favorable publicity. Manufacturers, hearing about the plan, have been more liberal in their allocations of merchandise to the Jefferson Drug Company because of its loyalty and generosity to one employee. The customers continue to save up and send in orders for Jim.

At intervals the firm sends each customer a statement of how Jim's account is coming along. As a befitting climax Jim was promoted from a private to a sergeant when information of this "incident" came to the attention of his commanding officer. "Any man," the officer said, "who has that much respect from both his customers and his company in civilian life is too good a man to remain a private in the Army."



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Politics Goes A-Banking

THE ONLY BOOK on money that was ever really popular was Coin Harvey's "Financial School." It had a great vogue back in the "free silver" days and stirred up more cracker barrel arguments than any similar publication has ever managed to inspire in this country.

It was read with shivers in Fifth Avenue mansions and with joy in crossroads stores, because it promised wealth through money, and without work. This bright promise has appealed to *homo sapiens* since the beginning of time, and Coin Harvey found a way to dress it up in layman's language and merchandise it to the public.

Sales of "Financial School" finally fell off in proportion as William Jennings Bryan's political fortunes began to fade and the public turned to fresher subjects of popular debate. But Coin Harvey's money fallacies did not die; they simply lay dormant. And now, says Samuel Crowther in his "Time to Inquire," published by John Day Co., they are popping up in the most extraordinary places.

Dark corners of our policy

AS A writer on economic subjects for the country's leading publications, Mr. Crowther has beamed his searching eye into many dark corners of government and business policy. In "Time to Inquire" he sums up his findings and views present-day policies and theories in the light of historical perspective—which means practical experience. Even Mr. Crowther is a bit appalled at what he finds as he ranges over the field of government-in-business, production, consumption, tariff policy, international policy, banking and finance, and similar topics.

Money seems mysterious to the citizen of average intelligence, says Mr. Crowther in his chapter entitled "The Money Illusion," because discussions of it are wrapped in a fog of such terms as prices, depressions, prosperity, devaluation, stabilization, interest and exchange rates, and the like. Yet money itself, he holds, is not mysterious; it becomes so only when money is confused with things, and when someone tries to do with money what money simply cannot do. It's an age-old error, says Mr. Crowther, to assume that numbers, called

dollars, stand for things—to confuse money with real wealth.

The author of "Time to Inquire" invites his readers to consider the application of this proposition to banking.

When the Government controls banking, it has a limitless power to create money, but almost no power to create wealth. In peacetime it can borrow the public's savings, but these never total more than a few billions, and in war the Government never raises much money by real borrowing. Instead, government "borrows" from banks by selling bonds to the banks. When it does so, a "deposit" is created which stays on the books until the bond is retired or is bought by an investor out of savings. The process is substantially the same, says Mr. Crowther, when an individual borrows.

"Government borrowing, and not business, has since 1916 been responsible for the growth in our bank deposits. That is news only to those who do not understand banking. There is no foundation for the notion that the increase in bank deposits is evidence of increased national wealth. (An additional factor in increasing the bank deposits has been the buying of gold.)"

And this, explains Mr. Crowther, is why a nation cannot get richer by creating credit money. A bank has no miracle-working powers. A bank seems to create money, but it really creates only a temporary purchasing power, with emphasis on the "temporary." For, unless purchasing power is used to create goods and services to extinguish the credit by repayment, the credit will not be paid by the borrower and must be paid by the bank.

"This means that, instead of new purchasing power having been created by the loans, it will turn out that a purchasing power in the amount of the loan has been subtracted from the general ability to buy. A lot of people had the chance to learn that when the banks were folding in the 'thirties. But they wanted to dodge reality and the politicians moved in."

Government, says Samuel Crowther in "Time to Inquire," falls into the age-old error of confusing money with real wealth, and builds a Tower of Babel with dollar bills

How thoroughly the politicians "moved in" on the banks, both in this country and in England, is indicated by the *London Economist* in its issue of September 4, 1943. A bank, said the *Economist*, "used to be an institution which collected savings by offering to pay interest on them, and used them to make loans to industry and trade." All that has changed, the *Economist* adds, and nowadays a bank "is an institution which holds the credit money of the community, created by Treasury financing, and uses it to finance the government deficit."

Credit can't buy Utopia

WHEN politicians use banks for this purpose, says Mr. Crowther, they are in effect playing around with what they think is an Aladdin's lamp.

"It is not possible," he points out, "for bankers, politicians, or anyone else indefinitely to create credit. This is a point of supreme importance which is often overlooked or talked around, especially by those social theorists who would buy their way into Utopia through the use of credit. Our economy consists of labor, raw materials and tools. A bank does not really create credit. That is a loose use of the word 'create.' It promises to pay if the borrower does not. And the only way that borrowers can pay—in the long run—is by using the credit to bring labor, raw materials and tools together to create something which will pay off the loans. If the loans are not capable of being turned into cash, the depositors may not be able to get back the money they put into the bank and will involuntarily, through the loss of their deposits, become the payers of the notes that the borrowers did not pay.

"This means that the depositors are deprived of their usual means of buying, the economy halts and the ordinary man finds himself out of work and ready to be convinced that he is the victim of the evils of the capitalist system, when in fact he is the victim of a boom brought on by violating the

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first principle of that system, which is that we can live only by creating and exchanging goods and never by creating and exchanging money."

Business in this country could be maintained on a level 25 per cent above 1929, excluding the speculation of that year, with a combined bank deposit and hand money base of about \$40,000,000,000, says Mr. Crowther. The difference between the bank money actually used and the stock available as shown by the bank deposits is the residue arising from government bank borrowings.

Politicians "fight" inflation

AND what finally happens?

"All the regulating and rationing in war time are piously undertaken to prevent what the political economists dub 'inflation.' And it is made to appear that 'inflation' is a vice of the people from which they must be saved.

"But, as we have seen, the people possess no power to change the value of money. Only the politicians can do that. The people cannot inflate; they can only test the value of money in goods. If it turns out that the money has little or no value—if prices go through the roof—that is proof to the people that they have been whip-sawed, and they will kick out the incumbent politicians.

"Rationing, with all its consequent regimentation, is a political device to keep the money ball in the air. The politicians, with a truly touching concern, take away the buying power of money before the people have a chance to equate money with goods. That is the inevitable sequence—in peace or in war—of trying to build a Tower of Babel with dollar bills.

"This brings us to the test I suggested. . . . If money will not buy beyond the amount set in the ration, it is only a ration ticket, regardless of the words stamped on the paper. Or, to put it another way, if money will not exchange for goods, then its only value, except as paper, is as food. The result of the money adventure is that we can give our money a value only by eating it.

"Our money wealth, as now expressed, has nothing to do with real wealth. It is only a dream castle."

Work for Can Openers

DESPITE RATIONING, the nation's can openers still have plenty of work. Civilians are using about 837,000,000 cans of food a month, according to A. H. Nugent, general sales manager of the American Can Company. In addition, he reports, the armed forces are using 8,000,000 cans of food a day.



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We Tour the HOME FRONT

Flying shoppers may take advantage of six helicopter routes to be established after the war by William Filene's Sons Co., Boston, store covering suburban Boston and points in New England. The helicopters will not only carry shoppers but give rapid package delivery if Civil Aeronautics Board grants the store's recent petition.

Holsters for pistol-packing police-women of New York City now not only carry guns but also have separate compartments for make-up kits. They were designed, made and donated by Coty, Inc.

Saving 850,000 pounds of tin since Pearl Harbor has been made possible by changes in solders and babbitt alloys at General Electric Company plants.

The 70-ton Mars built by Glenn L. Martin is the largest successful heavier-than-air aircraft in the world. The wingspread is 200 feet, the 117-foot two-deck hull is as large in cubic feet as a 14- or 15-room house. Four Wright engines deliver more than 2,000 horsepower each. The plane can carry more than 15 tons of cargo.

No garbage trail for U-boats to follow is left by ships which use the new chopping machine for waste material developed by the Chain Belt Company, Milwaukee. It reduces even bones to a pulp that sinks into salt water quickly without the former tell-tale trail.

250,000,000 books were produced by American publishers in 1943. Approximately 10,000,000 books were reported burned in the London air-raids. No report on the number destroyed in Berlin.

Nearly 23,000,000 ounces of silver will be bought by silver manufacturers from the Treasury for use in manufacture of consumptive goods.

Four "blind" rivets a minute can now be driven by means of a new device developed by Independent Pneumatic Tool Company, Chicago. Time saved in aircraft production is enough to build 20 more bombers a week.

Refrigerators, washers, ranges, and other household appliances will increase 25 to 40 per cent in the first year after postwar production hits full stride ac-

cording to estimates of the Norge Division of Borg Warner Corp., Detroit.

Postwar building of \$16,000,000,000 annually for the five-year period beginning 12 months after the war is forecast by Producers Council, national organization of manufacturers of building materials and equipment. Public improvements account for \$5,000,000,000 and public utility construction for \$1,300,000,000.

An electric dishwasher, efficient and cheap, is one of the items Crosley Corporation is investigating as a possibility for keeping its 8,000 workers employed after the war ends and for re-employing its 1,250 employees now in the armed forces.

Detachable sections were built into a service men's center at Huntington Park, Calif., so the building can be taken down and rebuilt after the war in some larger park in the city as a World War II memorial.

Fire-resistant lumber treated in 1943 will nearly triple the 1942 figure of 22,384,000 board feet according to J. F. Linthicum, president of American Lumber and Treating Company.

Work or fight at Moultrie, Ga., where a city ordinance is enforced which prevents "idling or loitering on city streets." Cards are distributed to all employees showing their place and hours of employment. The police check persons loitering and, if the individual has no card or is away from his job during normal working hours, he is arrested.

Nylon rope, one-half inch thick, half as heavy as manila rope of same dimensions, can lift a three-ton load. It stretches rapidly under sudden pull and recovers slowly which gives it the elasticity for a perfect shock absorber.

A giant vacuum cleaner has been devised for cleaning Columbus, Ga., streets of leaves. The device picks up the leaves and crushes them into small bits to be used for fertilizer on city gardens.

Despite shortages retail stores did an estimated \$62,900,000,000 volume in 1943—a gain of approximately \$5,100,000,000 over 1942.

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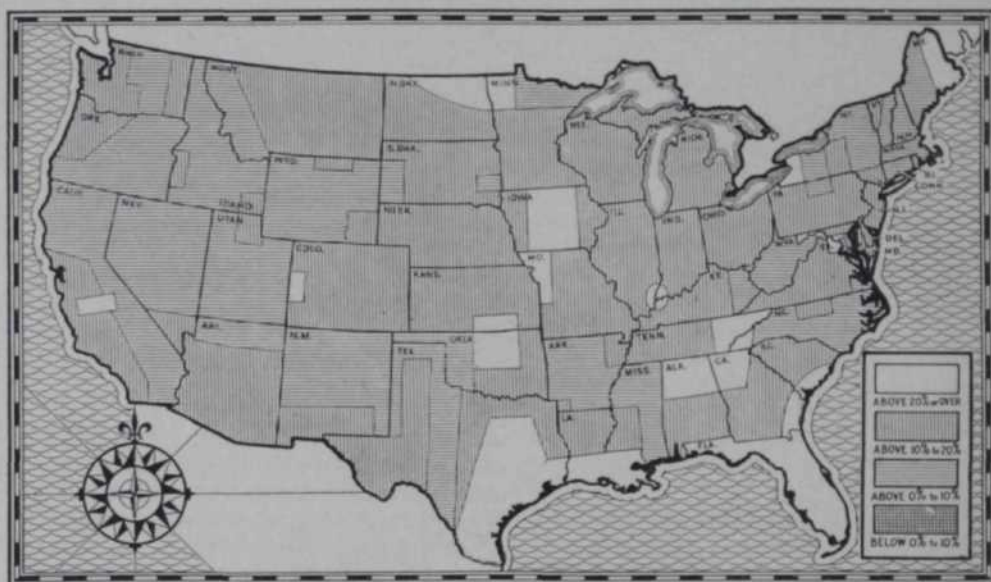
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The Map of the Nation's Business

By FRANK GREENE



INDUSTRIAL production as a whole continued at a high level in November notwithstanding some cutbacks and cancellations of government contracts. These made possible larger allotments of raw materials for making consumer goods.

The labor situation on the West Coast showed considerable improvement. Aircraft production in the short month reached a new high of 8,789 planes, of which a large proportion was heavy combat types. Shipyard deliveries of 164 vessels totaling 1,692,763 deadweight tons put the 1942-43 construction goal over the top.

Some let-up in steel demands were noted as industrial operations receded from the October peak. Construction contract awards dropped sharply, but electricity output again broke all records and crude oil production and carloadings were well above last year.

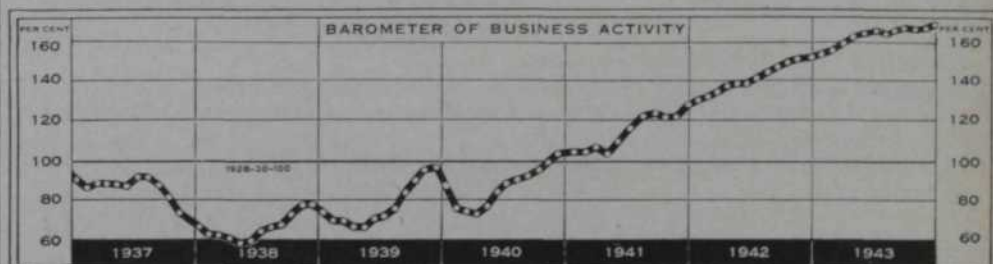
Commodity prices, particularly live-

The high level of consumer purchasing power continues to be reflected in the Map as retail sales rise sharply above 1942



The map of last month

stock and cotton, continued a mildly downward trend. Stock market values went lower in active trading. Early holiday shopping lifted retail sales above those of 1942. Check transactions rose sharply above last year.



War production was maintained at peak volume in November and the Barometer chart line again advanced slightly to a further new all-time high

NATION'S BUSINESS for January, 1944

"SURE, THERE'LL BE A PARADE..."

I know what I'm up against.

I know what the odds are.

I know what they mean by "lost at sea."

But I'm going to make it . . . nothing can stop me!

Sure, when this war's over there'll be crowds and cheers and ticker tape and confetti. Sure, there'll be handshakes and pats on the back and good wishes. Sure, but what's bringing me back is bigger than that . . .

I want what I've been fighting for . . . a fighting chance!

Maybe some folks would say I was crazy, if they could hear me talking out loud this way . . .

Maybe they'd laugh and say, "Listen, buddy, get wise . . . the trouble with guys like you is—you keep trying to do it the hard way . . ."

Well . . .

It wasn't easy learning how to swim, but I did . . . and now I won't drown. It wasn't easy to stick it out when the going got tough, but I did . . . and now *nobody* can make me quit. It wasn't easy finding out how to steer a course by the stars and the sun, but I did . . . and now, even from out here, I'm going to find my way home!

The girl I'm going to marry wasn't easy to win . . . because she's the finest girl in the world.

The job I'm coming back to wasn't easy to get . . . because it was the swellest job any guy ever had.

The future I'm after is so big nobody's ever going to hand it to me on a silver platter!

That's why I want a fighting chance . . . a chance to move *up* . . . an opportunity to go ahead. That's why I want to plan a future of my own in a land and a world where *every* man is free to make the most of his ability . . . where there'll be plenty of work days and plenty of pay days . . . with no limits on how high you can rise . . . how far you can go.

That's the America I left behind me.

That's the America I'm fighting for.

That's the America I want when I get back.

Here at Nash-Kelvinator we're building Pratt & Whitney engines for the Navy's Vought Corsairs and Grumman Hellcats . . . Hamilton Standard propellers for United Nations bombers . . . governors, binoculars, parts for ships, jeeps, tanks and trucks . . . readying production lines for Sikorsky helicopters. All of us devoted 100% to winning this war . . . to speeding the peace when our men will come back to their jobs and homes and even better futures than they had before . . . to the day when together we'll build an even finer Kelvinator, an even greater Nash!



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